Hyperion™ IN:TOUCH™ Guide

Dynalogic Info-Tech Corporation

620007-000-01

IN:TOUCH GUIDE

This manual is a non-technical user's guide that describes the IN:TOUCH telephone communication system. With a telephone attached to the Hyperion, you can place and manage both data and voice calls. IN:TOUCH also enables the Hyperion to communicate with a wide variety of remote devices: host computers, personal computers, and other Hyperions.

Published by: Bytec Management Corporation
10 October 1983
Version 00
Rev 01

This manual describes programs supplied under license.
(c) Copyright 1982, 83 Microsoft Corporation
Bytec Management Corporation

Can. manufactured Hyperions
UL #86H2
CSA LR33921
FCC Ident. CTJ7YM3012
FCC Regist. CTJ6YM-70433-DT-E

U.S.A. manufactured Hyperions
UL #86H2
CSA LR53711
FCC Ident. CTJ7JN3012
FCC Regist. CTJ7JN-70433-DT-E

Trademarks

Hyperion is a trademark of Bytec Management Corporation.
MS-DOS is a trademark of Microsoft Corporation.
IN:TOUCH is a trademark of Bytec Management Corporation.
IBM is a trademark of International Business Machines Corporation.

Disclaimer

The information in this manual has been carefully prepared and checked for completeness and accuracy. There is however, always the possibility of ommission or error. In such an event Bytec Management Corporation cannot assume liability for any damages resulting from the use of this manual.

Service Requirements

In the event of equipment malfunction, all repairs must be performed by Bytec Management Corporation, an authorized agent (dealer) of Bytec Management Corporation or any other organization authorized by your warranty agreement.

Avoiding Radio-Television Interference

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. Although everything possible has been done to limit the likelihood of interference, there is no guarantee that interference will not occur in a particular installation. If this happens the user is encouraged to try one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the computer and receiver are on different branch circuits.

If necessary, consult your dealer or an experienced radio/television technician.

If the Hyperion is malfunctioning, it may be causing harm to the telephone network. The Hyperion should, therefore, be disconnected until the source of the problem can be determined and repair has been made.

Before installing the Hyperion to the telephone network, you should check with your dealer to determine any government regulations which may be applicable.

TABLE OF CONTENTS

SECTION PAGE

INTRODUCTION

PART I - TUTORIAL

1. INTRODUCTION I-1
 - Assumptions I-1
 - Organization of this Tutorial I-1

2. CARING FOR YOUR IN:TOUCH DISKETTE I-3

3. INTERCONNECTION I-5

4. ACCESS THE COMMUNICATIONS SYSTEM I-7

5. CONFIGURE TO MATCH THE TELEPHONE NETWORK I-9

6. DIAL A VOICE CALL I-11

7. REDIAL THE LAST NUMBER CALLED I-13

8. CREATE A DIALER FILE ENTRY I-15

9. ADD A DIALER FILE ENTRY TO A SPEED DIALER I-17

10. SPEED DIAL A CALL I-18

11. THE DIFFERENCE BETWEEN VOICE AND DATA CALLS I-19

12. RETURNING TO DOS I-20

13. SUMMARY OF CONCEPTS I-21

...continued

TABLE OF CONTENTS (cont)

SECTION PAGE

Part II - BASIC CONCEPTS

1. **INTRODUCTION** II-1
 - The IN:TOUCH Package II-1
 - Organization of this Part II-1

2. **CONNECTING YOUR HYPERION FOR IN:TOUCH** II-3
 - If You Have Standard Telephone Wall Jacks II-3
 - If You Do Not Have Standard Wall Jacks II-3
 - If You Have a Keyset-Switch Telephone II-4
 - Connecting a Printer II-4
 - Using the Hyperion as a Data Terminal II-4
 - Caring for Your Master IN:TOUCH Diskette II-5

3. **ACCESSING IN:TOUCH FROM DOS** II-6
 - Back to DOS II-6

4. **THE IN:TOUCH SCREENS** II-9
 - Main IN:TOUCH Screen II-9
 - Other IN:TOUCH Screens II-11

5. **ENTERING IN:TOUCH COMMANDS** II-12

6. **THE SOFT KEY LINES** II-12

7. **MOVING THE CURSOR ABOUT THE SCREEN** II-15
 - The Block Cursor II-15
 - The Editing Cursor II-15

8. **SPECIAL KEYS USED IN IN:TOUCH** II-21

9. **THE DIALER FILE** II-24

10. **DIFFERENT WAYS OF PLACING A CALL** II-24
 - Data Calls II-24

11. **THE DIFFERENCE BETWEEN VOICE AND DATA CALLS** II-25

...continued

TABLE OF CONTENTS (cont)

SECTION PAGE

Part III - USING IN:TOUCH

1. INTRODUCTION III-1

2. INITIAL CONFIGURATIONS III-3

2.1 Matching the Telephone Network III-3
2.2 Adjusting the Hyperion Speaker Volume III-6
2.3 Timing the Call III-7

3. MAINTAINING THE DIALER FILE III-9

3.1 Accessing the Dialer File III-9
3.2 Dialer File Order III-11
3.3 Numbers and Symbols Used in the Dialer File III-12
3.4 Visible and Invisible Parts of a Dialer File Entry III-15
3.5 Locating a Dialer File Entry III-15
3.6 Adding a Dialer File Entry III-17
3.7 Editing a Dialer File Entry III-19
3.8 Deleting a Dialer File Entry III-21

4. DIALING A NUMBER III-23

4.1 Used As a Regular Telephone III-23
4.2 Using the Hyperion Dial Pad III-23
4.3 Autodial From the Dialer File III-25
Data Calls III-27
4.4 Speed Dialing a Call III-27
4.5 Redialing III-28
4.6 Other Ways to Dial Voice Calls III-28
Combination Dialing III-28
4.7 Using the Hyperion While Conversing III-29
4.8 Turning the Speaker On/Off III-29

...continued

TABLE OF CONTENTS (cont)

SECTION		PAGE
5.	**USING THE SPEED DIALER**	**III-31**
5.1	Soft Key Labels For the Four Speed Dialers	III-31
5.2	Speed Dialer Display Screen	III-33
5.3	Soft Key Labels For the Ten Speed Dialer Entries	III-33
5.4	Adding a new Entry to a Speed Dialer	III-34
5.5	Editing a Speed Dialer Entry	III-37
5.6	Deleting a Speed Dialer Entry	III-37
6.	**DATA CALLS**	**III-39**
6.1	Types of Data Calls	III-39
6.2	Adding a Data Call Number to the Dialer File	III-41
6.3	The Data Transmission Parameters	III-42
6.4	Manually Setting the Transmission Parameters	III-47
6.5	Making a Data Call	III-50
	Using the Dialer and Speed Dialer Files	III-50
	Signing On	III-50
	Uploading/Downloading Files	III-50
6.6	Terminating the Data Call	III-51
6.7	Teaching Your Hyperion an Input Sequence	III-53
	Entering "Pauses" Into a "Learned" Sequence	III-55
	Changing a "Learned" Sequence	III-55
	"Recalling" a "Learned" Sequence	III-56
6.8	Use the Hyperion as a Data Terminal	III-57
6.9	Send and Receive Files	III-59
	To send (UPLOAD) a file	III-59
	To accept (download) a file	III-61
	Special Precautions for Transferring Files Using the Manual Data Set-up	III-63
	Consulting Your Diskette Directory	III-64
7.	**TERMINAL EMULATION**	**III-65**
7.1	Terminal Emulation	III-65
7.2	Returning to IN:TOUCH	III-66
7.3	Error Messages	III-67
8.	**PHONECNV**	**III-69**
8.1	File Structures	III-69
8.2	Using Phonecnv	III-70
8.3	User Interaction	III-71
8.4	Error Messages	III-71

INTRODUCTION

IN:TOUCH (TM) provides you with a dynamic communications tool which makes and manages both voice and data telephone calls. You create and maintain a personal telephone directory (known as your dialer file) which you may use to dial calls automatically. In addition, by pressing a single key, you may speed dial any of up to 40 stored telephone numbers.

This ***Hyperion IN:TOUCH Guide*** is divided into three parts:

Part I - **Tutorial**, guides you through a few exercises that will allow you to quickly become adept at using many of the Hyperion's IN:TOUCH capabilities.

Part II - **Basic Concepts**, describes some of the key ideas upon which IN:TOUCH is based. You should understand these concepts if you are to use IN:TOUCH effectively.

Part III - **Using IN:TOUCH**, describes a series of IN:TOUCH applications such as: automatic dialing, editing the dialer file, speed dialing, regular dialing, data calls, plus a quick reference of all IN:TOUCH commands.

A **Quick Reference** section is provided with this manual containing a summary of IN:TOUCH functions and soft key lines.

The ***Hyperion IN:TOUCH Guide*** is one of several available Hyperion manuals:

1) The ***Hyperion Setup Guide***, which was the first book you read about the Hyperion, describes first-time setup procedures.

2) The ***Hyperion User Guide*** is second in the series. It is an introductory tutorial to the Disk Operating System (DOS), and the single-line text editing system EDLIN. It contains both expanded and Quick Reference sections describing Hyperion commands.

.... continued

3) A ***Hyperion Programmer Guide***. This is a BASIC and Assembler manual and explains these sophisticated programming languages which you may wish to use when you become more familiar with your Hyperion.

4) There is a user guide written for each software system available for the Hyperion: **IN:SCRIBE**, a word processor; **IN:TOUCH**, the communications management system; **MULTIPLAN** (TM), an electronic spreadsheet; **1-2-3**, an electronic spreadsheet with graphics capability and database management; and **Aladin**, a powerful problem-solving relational database.

Part I

TUTORIAL

1. INTRODUCTION

The first part of this guide is an IN:TOUCH tutorial. Its objective is to guide you step-by-step through the IN:TOUCH procedures needed to do basic telephone communiciation tasks.

Assumptions

It is assumed that you are already familiar with the Disk Operating System (DOS) as described in the Hyperion User Guide, since this DOS is the necessary operating system from which IN:TOUCH is first accessed, and to which IN:TOUCH relinquishes control after a communications session.

Organization of this Tutorial

This tutorial is divided into 13 sections:

- ***Section 2*** describes how to care for your IN:TOUCH diskette.
- ***Section 3*** describes the interconnection to other communications devices.
- ***Section 4*** shows how to access IN:TOUCH from DOS.
- ***Section 5*** describes how to configure the Hyperion to match the local telephone network it is being connected to.
- ***Section 6*** shows how to dial a voice call.
- ***Section 7*** shows how to redial the last number dialed.
- ***Section 8*** creates a dialer file entry.
- ***Section 9 and 10*** describe speed dialing.

- ***Section 11*** discusses the difference between voice and data calls.

- ***Section 12*** shows how to exit from IN:TOUCH to DOS.

- ***Section 13*** summarizes the concepts presented in this tutorial.

After this tutorial is completed, you should read Part II of this guide. Part II describes the basic IN:TOUCH concepts in detail. When actually using IN:TOUCH, refer to Part III for a detailed description of all IN:TOUCH applications. IN:TOUCH commands are summarized alphabetically at the end of Part III.

2. CARING FOR YOUR IN:TOUCH DISKETTE

Before using IN:TOUCH for the first time you should make a copy of your IN:TOUCH diskette. This copy should be used and the original stored in a safe place.

STEP

1) Insert the Master User Diskette (or copy) into drive A.

2) Load the Disk Operating System (DOS) into the Hyperion as described in the ***Hyperion User Guide***.

3) Press the D-COPY soft key (F6) on the disks soft key line. The system responds by prompting you to insert a source diskette in drive A and a target diskette in drive B.

4) Remove the user diskette from drive A and replace it with the Master IN:TOUCH diskette.

5) If you have a single-drive system, press **Rtn**, and follow the prompts.

 OR

 If you have a double-drive system, insert a new formatted diskette into drive B, then press **Rtn**.

6) The system copies the contents of the Master IN:TOUCH diskette onto the new diskette, and then prompts with the following message:

 Copy another diskette (Y/N)?

7) Enter **N.**

The system returns you to DOS. You now have a copy of the Master IN:TOUCH diskette.

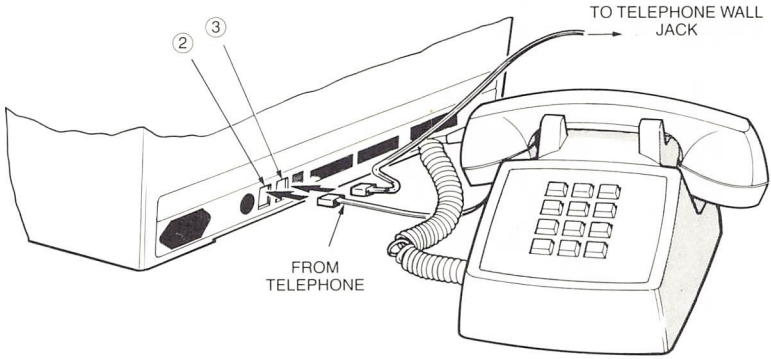


Fig I-1 - Connecting your Hyperion to the local telphone network.

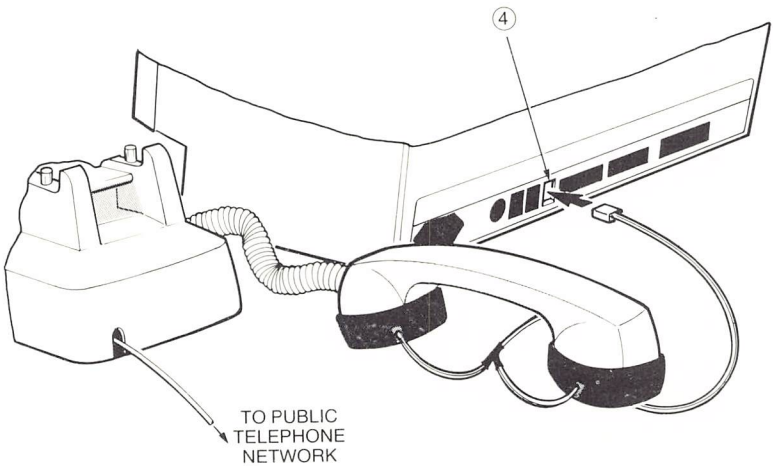


Fig I-2 - If telephone jacks are not available you need acoustic cups.

3. INTERCONNECTION

The Hyperion is capable of communicating with a wide variety of remote devices, from the host computers of various data services to microcomputers, including IBM personal computers and other Hyperions. With your telephone attached to the Hyperion, you can make and manage not only data calls, but voice calls as well.

STEP

1) Make sure your Hyperion is connected to the local telephone network as shown in Fig I-1.

...continued

Connector number 2  is used to attach a telephone to the Hyperion, if you have standard telephone jacks.

Connector number 3  is used to hook the Hyperion into the public telephone network. Connectors number 2 and 3 are used together.

Connector number 4  connects the optional acoustic cups to the Hyperion as shown in Fig. I-2. Acoustic cups are only necessary when standard telephone wall jacks are unavailable.

The IN:TOUCH communications system has been provided to make the telecommunication of information as simple and straightforward as possible.

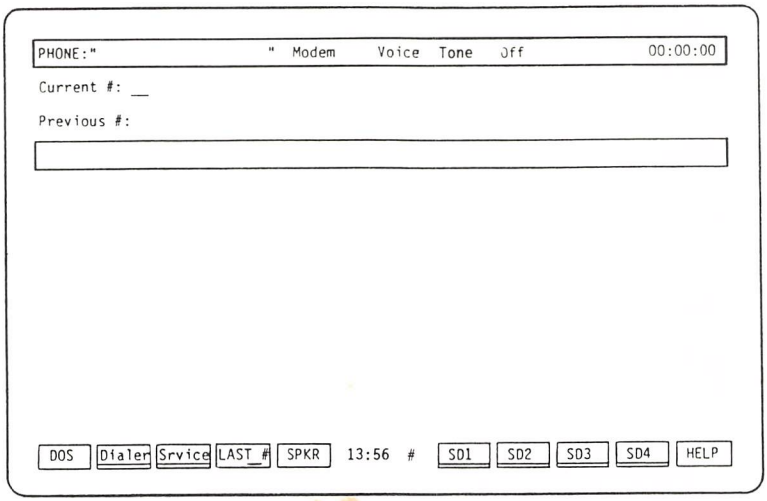


Fig. I-3 - The IN:TOUCH screen format.

4. ACCESS THE COMMUNICATIONS SYSTEM

IN:TOUCH is a special program that is accessed by entering the command **PHONE**.

STEP

2) Make sure that you are in the DOS system. The DOS soft key line should be displayed.

3) Insert the Master IN:TOUCH Diskette into drive A.

4) Enter the word **PHONE**, then press **Rtn**.

...continued

The screen clears, and after a few seconds, the IN:TOUCH screen (as shown in Fig. I-3) appears.

Note that the soft key labels have changed again. The communication system's many soft keys and capabilities are described in Parts II and III.

Pressing **F10** will display a HELP screen describing the function of each soft key. Pressing **Ctrl** + **F10** will display the full IN:TOUCH soft key map of all soft key lines in IN:TOUCH. This map is a quick guide to the functions in IN:TOUCH. It also shows you how to access different screen levels.

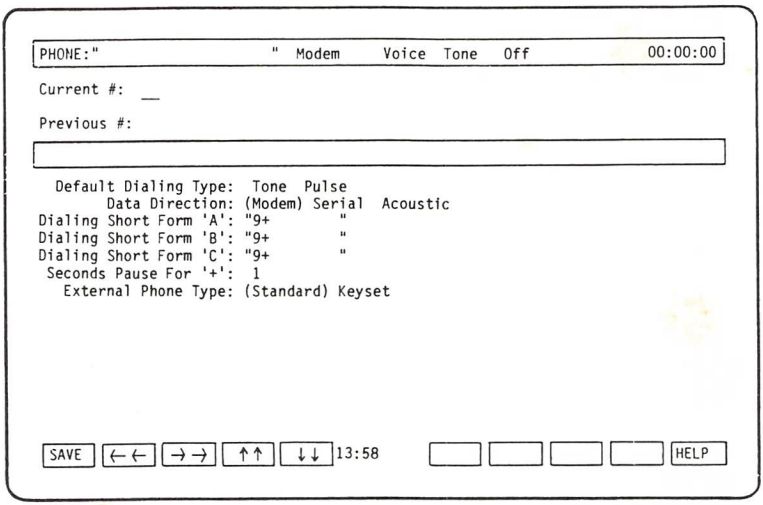


Fig. I-4 - The configuration table, and soft key line.

5. CONFIGURE TO MATCH THE TELEPHONE NETWORK

At the top of the IN:TOUCH screen, in the center of the bar of highlighting, four words appear. These are reminders of your current Hyperion configuration. The third word is either **Pulse** or **Tone**, indicating the type of dialing currently in effect. The Hyperion can be configured to match the type of telephone dialing available wherever you happen to be. Both pulse (the "clicks" for a dial system) and tone (the "notes" for a keypad system) are available.

If the dialing type currently in effect must be changed, use the following procedure:

STEP

5) Press **F3**, the ***Srvice*** soft key to display the SERVICE soft key line.

6) Press **F8**, the CONFIG soft key.

The IN:TOUCH configuration table appears on the screen, with a block cursor (bar of highlighting) located on the first line. Notice that the soft key line contains four labels consisting of double arrows. The associated keys control the block cursor, moving it in the directions indicated: left, right, up and down.

STEP

7) Using the cursor control soft keys, move the highlight to either **Pulse** or **Tone**, as required.

8) Press **F1**, the SAVE soft key.

 The configuration table disappears, and the SERVICE soft key line is redisplayed.

9) Press **F1**, the ***Main*** soft key.

...continued

You are now back to the MAIN soft key line. If you changed the dialing type, notice that the third word at the top of the screen has also been changed accordingly.

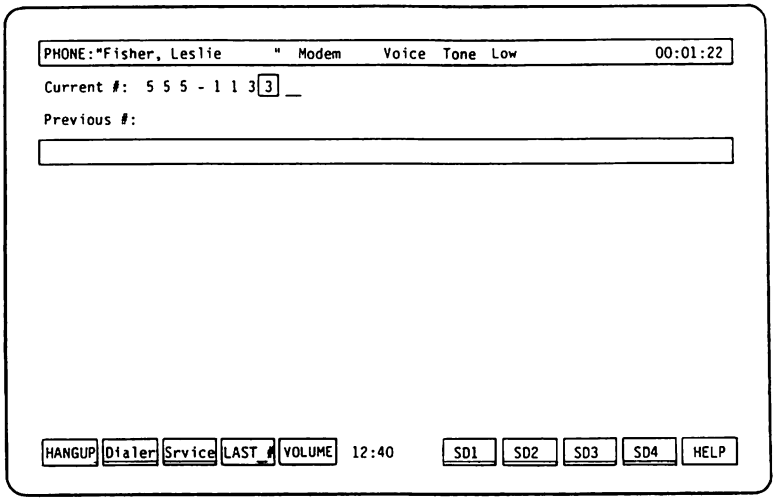


Fig. 1-5 - The IN:TOUCH screen again, this time with a voice call in progress. Note that the soft key line labels F1 and F5 have changed to HANGUP and VOLUME respectively. This is called the CALL ACTIVE soft key line.

6. DIAL A VOICE CALL

You can continue to use your telephone in the normal manner when it is attached to the Hyperion. However, you may, if you choose, take advantage of the automatic dialing feature when placing a call.

STEP

10) Press the **Num Lock** key until the octothorpe (#) appears in the center of the soft key line.

11) Using the numeric keypad, enter a 7-digit local number.

 Digits and the hyphen are all acceptable characters in a telephone number.

12) Press **F5**, the SPKR soft key.

 The soft key line changes to the the CALL ACTIVE soft key line shown in Fig. I-5.

 You will hear the system begin dialing the number. The cursor moves across the number, highlighting each one as it is being dialed; the cursor will stop at the last number.

13) When you hear the called party answer, pick up the telephone receiver to converse.

14) When the conversation ends, replace the receiver on the telephone to disconnect the call, or press **F1** (HANGUP).

 Soft key line changes back to the MAIN soft key line.

...continued

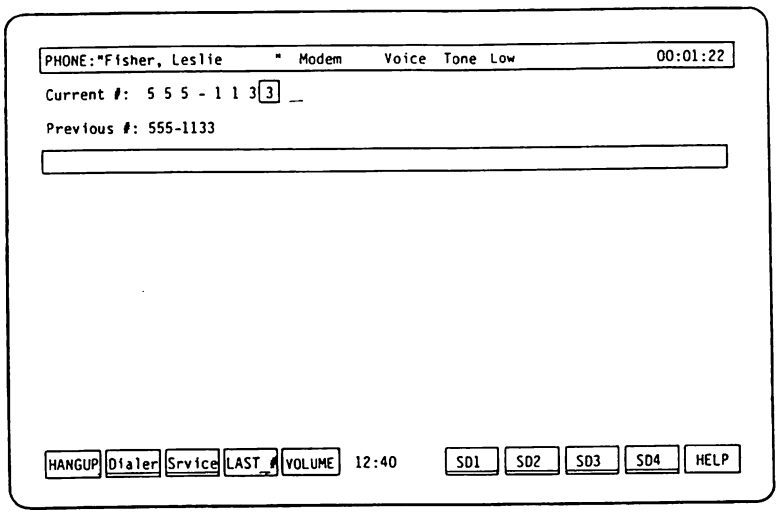


Fig. I-6 - The main IN:TOUCH screen, with a redialed voice call in progress.

7. REDIAL THE LAST NUMBER CALLED

Whenever you dial a telephone call using the Hyperion, the number you dial appears at the top of the screen on the **"Current #:"** line. After hanging up, the telephone number is moved to the **"Previous #:"** line. Calls to the "previous" number may be redialed by only one keystroke.

STEP

15) Press **F4**, the LAST_# soft key.

Soft key line changes to the CALL ACTIVE soft key line.

You will hear the system begin dialing the number.

16) Press the **F1** (HANGUP) key to disconnect the call before it goes through,

OR

when the called party answers, pick up the telephone receiver to converse.

17) When the conversation ends, replace the receiver on the telephone to disconnect the call; or press **F1** (HANGUP). MAIN soft key line labels are redisplayed.

...continued

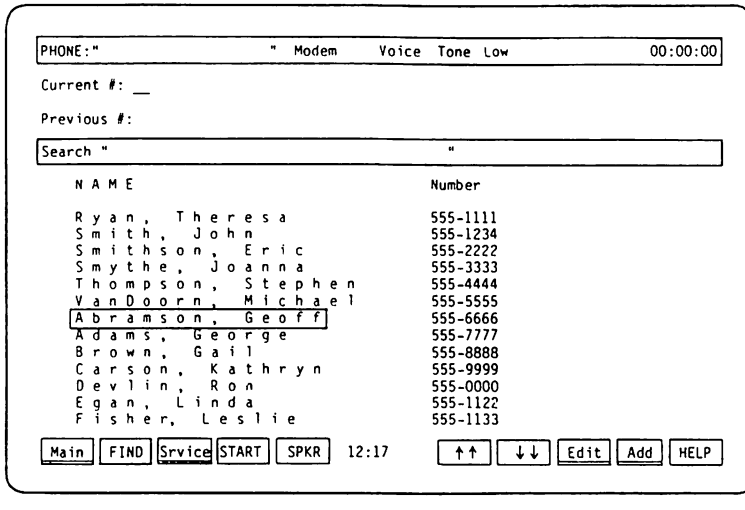


Fig. I-7 - The dialer file displayed.

8. CREATE A DIALER FILE ENTRY

IN:TOUCH allows you to create a personal telephone directory, called a dialer file, in which you can store telephone numbers for reference and automatic dialing. Each name and telephone number you place in your dialer file is called an entry.

STEP

18) Press **F2**, the DIALER soft key to display the current dialer file and DIALER soft key line (shown in Fig. I-7).

19) Press **F9**, the ***Add*** soft key.

Your dialer file disappears, and you are presented with a blank line on which to type the new entry. The block cursor highlights the name field of this blank line.

The soft key line changes to the EDIT/ADD soft key line to enable you to move the block cursor and to save the new information.

20) Using the alphanumeric keys, enter a name.

21) Press **F5** (→→) or **Tab** to move the cursor one field to the right.

22) Using the cursor-number keypad, enter the corresponding telephone number.

23) Press **F1**, the SAVE soft key, to save the new entry.

You are returned to the dialer file and DIALER soft key line. The name and telephone number you have just entered are positioned at the block cursor.

...continued

STEP

24) Press **F5**, the SPKR soft key. This activates the Hyperion speaker and begins dialing the number highlighted by the block cursor (the number you have just entered).

The dialer file disappears and the soft key labels change those for the CALL ACTIVE soft line.

...continued

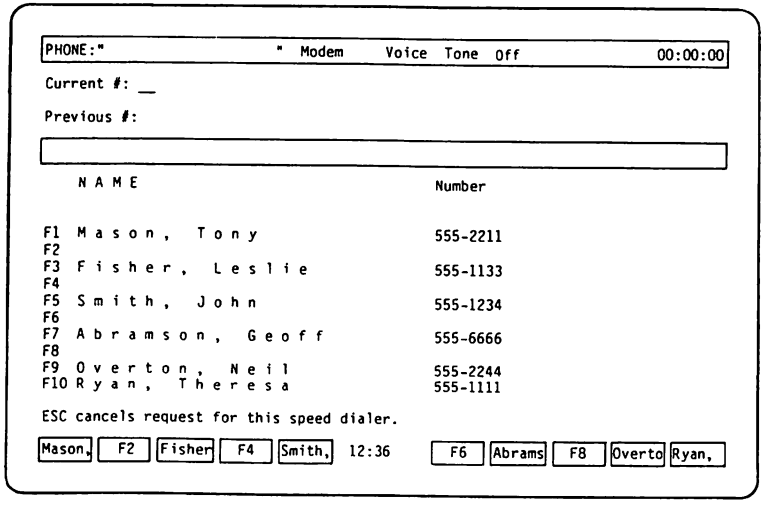


Fig. I-8 - A speed dialer screen with entry added.

9. ADD A DIALER FILE ENTRY TO A SPEED DIALER

Speed dialers are short lists of dialer file entries. Telephone numbers stored in speed dialers are more quickly accessed than those stored in the main dialer file. Consequently, frequently-called numbers should be listed in one of the 4 available speed dialers.

To copy a number from the dialer file into a speed dialer, you must first highlight the number in the dialer file. Currently the entry just created should be highlighted on the screen.

STEP

25) Press **F2** (***Dialer***) to redisplay the dialer file and DIALER soft key line.

26) Press **F8**, the EDIT soft key.

Your dialer file disappears, and the entry at the cursor position (which you just added to the file) is isolated. The ADD/EDIT soft key line appears.

27) Press **F6**, the SD1 soft key, to display Speed Dialer 1.

The soft key line changes to display the names of the speed dialer entries.

Notice that by pressing F7, F8 or F9, you could have accessed any of the other three possible speed dialers.

28) Press **F1**, to add the current name and telephone number to line 1 in Speed Dialer 1. The speed dialer display disappears, and the dialer file entry is redisplayed.

29) Press **F1**, the SAVE soft key. The dialer file and DIALER soft key line are redisplayed.

30) Press **F1**, the ***Main*** soft key.

The dialer file disappears and the MAIN soft key line is redisplayed.

...continued

10. SPEED DIAL A CALL

Pressing just one key accesses a speed dialer containing up to ten telephone numbers. The names associated with each number are displayed, each as a soft key label. Pressing the appropriate soft key then automatically dials the corresponding speed dialer number.

STEP

31) Press **F6**, the SD1 soft key to display speed dialer 1.

 The soft key label line now displays 10 labels, one for each of ten possible speed dialer entries. The name you have just designated as a speed dialer entry is label 1.

32) Press **F1**. The system automatically dials your call and displays the CALL ACTIVE soft key line.

33) Pick up the telephone receiver to converse, or press **F1** (HANGUP) to disconnect the call before it is completed.

34) When the call ends, replace the receiver on the telephone to disconnect the call, or press **F1** (HANGUP). The MAIN soft key line is redisplayed.

...continued

11. THE DIFFERENCE BETWEEN VOICE AND DATA CALLS

During a voice call, you lift the telephone receiver and converse with the person you dialed. During a data call the Hyperion "converses" with a remote device, for example another Hyperion or a mainframe. The nature of the signals (data) being exchanged by the machines requires special handling.

The telephone receiver should not be lifted during a data call. Lifting the receiver causes noise which interferes with signals being exchanged. You do, however , hear the data call as it is being dialed and answered - via the Hyperion speaker.

Once a carrier tone (high-pitched whistle) is detected, the speaker is automatically turned off. The IN:TOUCH screen displays the first of a series of soft key lines used for data call management. There is no reason to audibly monitor the data signal.

Communication between the Hyperion and a remote device requires the use of a modem (***mod***ulator ***dem***odulator) to manage the signals being exchanged. The Hyperion has a built-in modem which can be set to handle the signal characteristics of almost any data service or device. External signal lines may be connected directly to the Hyperion or through (optional) acoustic cups.

The steps involved in dialing and managing a data call depend on the type and nature of the remote device. For more information on using IN:TOUCH for data communications, see Part III, Section 6.

12. RETURNING TO DOS

To exit from IN:TOUCH and return to DOS:

STEP

35) Press **F1** (DOS) from the MAIN soft key line.

The system asks: **Are you sure?**

36) Press **F6** (YES).

The system exits from IN:TOUCH and redisplays the DOS soft key line. You are now back in the Disk Operating System.

...continued

13. SUMMARY OF CONCEPTS

In this section you have learned how to:

- copy the IN:TOUCH Master Diskette.
- access the IN:TOUCH telephone communications system.
- match the Hyperion dialing configuration to match the local telephone network.
- dial a voice call.
- redial a previous number.
- create a dialer file entry.
- add an entry to a speed dialer, and
- speed dial a call.

You have also gained more experience in using soft key lines to enter commands, and have been introduced to the following features:

- **CURSOR CONTROL** of the block cursor.
- **CURRENT CONFIGURATION REMINDER LINE**. You always know the direction of output signals, the call type and dialing type.
- **AUTOMATIC DIALING** from the keyboard/numeric pad, from the dialer file, and from a speed dialer.

These are only a few of the commands and features available in IN:TOUCH. Remember, there are 12 soft key lines, each having from two to ten commands. Pressing **Ctrl** + **F10** will display the IN:TOUCH soft key map.

All commands and features are described in Part III of this user guide.

LAST STEP

37) Read Part II of this guide, then proceed to use IN:TOUCH whenever you need to use the Hyperion to send voice or data across the telephone network.

Part II

BASIC CONCEPTS

1. INTRODUCTION

The IN:TOUCH system is a customized use of the Hyperion equipment for data and voice transmission. As such, a user should become familiar with certain basic concepts, described in this part of the IN:TOUCH guide.

The IN:TOUCH Package

The IN:TOUCH package comprises: the IN:TOUCH software, available on the Master IN:TOUCH Diskette kept at the back of the ***Hyperion IN:TOUCH Guide***; a modem card which your Hyperion dealer can install into your Hyperion; and a telephone cable with a plug-in jack at either end, so that you can connect the Hyperion with any telephone company outlet.

Other available options include a set of acoustic cups, a keyset-switch telephone cable and connectors, and terminal emulation filter files.

Organization of this Part

Part II is organized to describe the following basic IN:TTOUCH concepts:

* How to connect your Hyperion for IN:TOUCH and how to prepare the software is described in ***Section 2***.
* The procedure to access IN:TOUCH from the disk operating system (DOS), and to exit from IN:TOUCH back into DOS, is described in ***Section 3***.
* The IN:TOUCH display screen is described in ***Section 4***.
* How to enter IN:TOUCH commands is described in ***Section 5***.
* The soft key lines, and how they are used, is described in ***Section 6***.

Organization of this Part (cont)

* How to move the cursor about the display screen is described in ***Section 7***.

* The use of special keyboard keys is described in ***Section 8***.

* The dialer file is described in ***Section 9***.

* The differences between voice and data calls is pointed out in ***Section 10***.

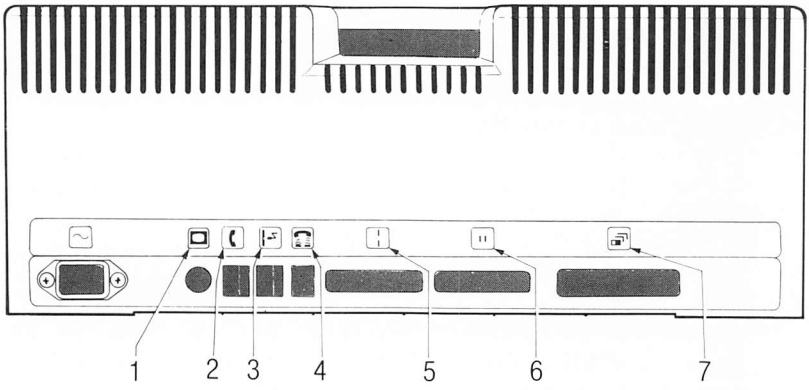


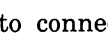
Fig. II-1 - The Hyperion rear panel connectors.

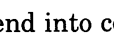
2. CONNECTING YOUR HYPERION FOR IN:TOUCH

Your Hyperion has the capability to communicate with other terminals, computers, and Hyperions. This is done by sending the data across standard telephone lines.

If You Have Standard Telephone Wall Jacks

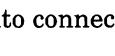
STEP

1) Unplug your telephone from the wall jack, and plug it into connector number 2  on the back of the Hyperion.

2) Plug one end of the supplied two-ended telephone cable into the wall jack, and plug the other end into connector number 3  at the back of the Hyperion main unit.

If You Do Not Have Standard Wall Jacks

If you do not have standard telephone wall jacks on location, you will not be able to use the voice-call dialing capabilities of the Hyperion.

To use your telephone line to communicate with other computer devices, you will have to connect the optional acoustic cups that are available for the Hyperion. Acoustic cups are placed over the telephone handset, and the cord running from the cups is plugged into connector number 4  at the back of the Hyperion. Wait for the carrier tone, then attach one cup to the earpiece, and the other to the mouthpiece, of the handset.

If You Have a Keyset-Switch Telephone

The "keyset-switch" telephone is an office telephone with a row of five keys below the dial. Such telephones can access up to five different lines and are connected to the local central office by a 50-wire telephone cable.

As an option, the Hyperion can be supplied with a 50-pin connector into which both the telephone connector, and the wall connector, can be plugged. This 50-pin connector is, in turn, connected to two plugs that go into the connectors numbered 2 and 3 at the back of the Hyperion main unit. One line of your keyset telephone then becomes the line used with the Hyperion. The appropriate key lights up when that line is in use.

Connecting a Printer

When using the Hyperion as a data terminal, having it attached to a printer is a useful feature. Parallel printers are connected to connector number 6  at the back of the Hyperion. Parallel printers receive information in parallel (character-by-character) form. Serial printers are connected to connector number 5  Serial printers receive information in a serial (one bit of information after another) form.

When a printer is to be used, the appropriate print filter file (filename extension PRN) must be available for loading into drive C.

Using the Hyperion as a Data Terminal

The Hyperion can be made to resemble one of two types of data terminals. This is done by loading the appropriate terminal emulation filter file (filename extension **EXT**). Terminal emulation packages may be purchased separately from your dealer.

Caring for Your Master IN:TOUCH Diskette.

Your Master IN:TOUCH Diskette is kept at the back of the ***Hyperion IN:TOUCH Guide***. This diskette contains all the software needed to use the IN:TOUCH system. Since this diskette is your only source of IN:TOUCH software, you should take good care of it.

Before using IN:TOUCH for the first time, make a copy of the Master IN:TOUCH Diskette, and subsequently use only this copy. If you use the Master IN:TOUCH Diskette, and it is damaged, you will be left without a replacement.

STEP

1) Insert the Master User Diskette (or copy) into drive A.
2) Load the Disk Operating System (DOS) into the Hyperion as described in the ***Hyperion User Guide***.
3) Press the **D-COPY** soft key (F6) on the DISKS soft key line. The system responds by prompting you to load a source diskette into drive A and a destination diskette into drive B.
4) Remove the user diskette from drive A and replace it with the Master IN:TOUCH Diskette.
5) If you have a single-drive system, press **Rtn**, and follow the prompts.

 OR

 If you have a double-drive system, insert a new diskette into drive B, and then press **Rtn**.
6) The system will copy the contents of the Master IN:TOUCH Diskette onto the new diskette, and then prompt you with the question:

 Copy another diskette (Y/N)?
7) Enter **N**.

 The system will return you to DOS.

This way you will have a copy of the Master IN:TOUCH Diskette.

3. ACCESSING IN:TOUCH FROM DOS

STEP

1) Make sure you are in DOS; that the main DOS soft key line is displayed, and that the Master IN:TOUCH Diskette, or copy, is in drive A.

2) Enter the word **PHONE** and press **Rtn.**

NOTE: you may find it useful to create a special diskette containing only IN:TOUCH programs. Your dialer file is currently stored on the same diskette as the IN:TOUCH software, and if other software (i.e., IN:SCRIBE, DOS) is also present, the space available for your dialer file is correspondingly reduced.

NOTE: One of the blank soft keys on the DOS soft key line may be used for IN:TOUCH using the Keyedit utility. Refer to the Hyperion User Guide for procedures on custom labelling soft keys.

Back to DOS

The PHONE command, described above, loads the IN:TOUCH software from the master diskette (or copy) into the Hyperion's internal memory. Once this is done, the screen shown in Fig. II-2 appears. The first IN:TOUCH soft key line, the MAIN soft key line, is displayed at the bottom of the screen. You are now ready to dial telephone calls, or to begin working with your dialer file.

When you are through using IN:TOUCH, pressing the appropriate soft key returns you to DOS.

STEP

1) Press the **DOS** soft key line (F1) from the main IN:TOUCH soft key line. The prompt, **"Are you sure?"**, appears on the left of the soft key line.

2) Press the **Yes** soft key (F6) to exit to DOS.

Pressing the **NO** soft key, or the **Esc** key, returns you to the MAIN soft key line.

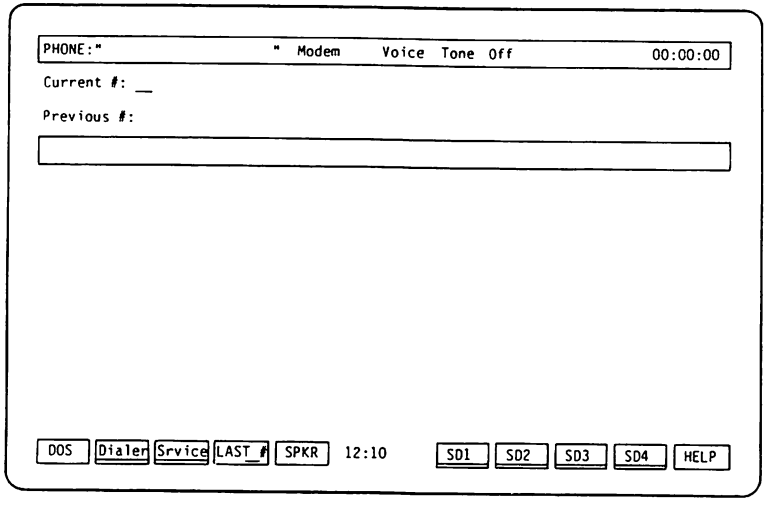


Fig. II-2 - The IN:TOUCH display screen.

4. THE IN:TOUCH SCREENS

Main IN:TOUCH Screen

The main IN:TOUCH screen (Fig. II-2) displays information pertaining to the current telephone call, or the current dialer file entry:

* The ***highlighted line*** at the top of the screen displays:
 - the name associated with the telephone number currently being dialed or currently connnected (labelled **"PHONE:"**).
 - four status indicators: the current direction of the telephone signal (**Modem**, **Acoustic** coupler, or **Serial** port); the call type of the current telephone call (**Voice Manual-Data or Auto-Data**); the type of dialing currently in effect (**Tone** or **Pulse**); and the speaker volume (**Off, Low, Med, High**, or **Max**).
 - a call duration timer.

* The remainder of the screen is divided into two portions by a shaded horizontal line. This is the ***search line***. When performing a dialer file search, the text string being sought is displayed here.

* Two labels are displayed ***above the search line***:
 - the line labelled **"Current #:"** contains the number which is currrently being dialed or which is currently connected.
 - the line labelled **"Previous #:"** contains the last number dialed.

* From time to time, ***all or part of the information*** above the search line will disappear. This occurs to allow extra display space for certain screens (HELP information, for example). When the extra space is no longer required, the information above the search line reappears unchanged.

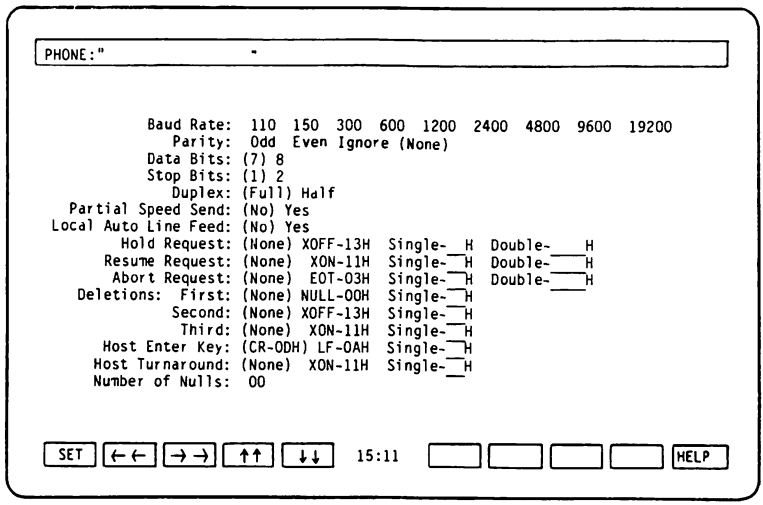


Fig. II-3 - The MODEM screen and soft key line, one of the specialized IN:TOUCH dispplay screens.

SCREENS (cont)

* ***Between the search line and the soft key label line*** at the bottom of the screen is an area called the dialer "window". Initially, this is blank. However, when the DIALER soft key line is in use, up to 13 lines of the dialer file are visible in this window.

* The line of highlighted boxes at the bottom of the screen is, as in DOS and IN:SCRIBE, ***the soft key line***. In IN:TOUCH, the soft key line contains dialing commands, dialer file editing commands, and block cursor control keys. Pressing the appropriate soft key, F1 to F10, immediately executes the command shown in the corresponding soft key label. Soft keys are normally the only means of entering IN:TOUCH commands.

Other IN:TOUCH Screens

This summarizes the characteristics of the main IN:TOUCH display screen. There are other IN:TOUCH screens which are pecialized for certain tasks. These are illustrated with the descriptions of IN:TOUCH functions which follow.

5. ENTERING IN:TOUCH COMMANDS

IN:TOUCH commands are normally entered via the ***soft keys***. You need not press **Rtn** after any command. The Rtn is included in the soft key action, and pressing the soft key immediately executed the command. No parameters are required for any of the commands.

Occasionally, the system prompts you for further action before it executes a command. This prevents accidental execution of commands which have permanent effects on your dialer file. For example, IN:TOUCH asks **"Are you sure?"** before deleting a dialer file entry. You must answer "YES", in order for the command to be carried out.

If you mistakenly execute a command which moves you to an unwanted screen and soft key line, there are two possible ways to reverse your action: pressing soft key **F1** or pressing the **Esc** key.

On many IN:TOUCH screens, soft key F1 is used to return to a specific soft key line. In fact, it is ultimately used to return to DOS.

The **Esc** key is your means of cancelling many IN:TOUCH commands or of "escaping" from the current screen and soft key line. The soft key line to which you return varies depending on the current soft key line.

When soft key F1 is labelled SAVE or SET, it may be preferable to use the Esc key to leave an unwanted screen. If you press SAVE or SET, you may save any changes you made between entering and leaving that screen. If you press the Esc key, any changes you made on that screen are ignored.

6. THE SOFT KEY LINES

The soft keys are located across the top of your keyboard. These keys are not commands in themselves. Each key represents a command displayed on the soft key label line. Pressing F3, for instance, will have a different result depending on which soft key label line is currently being displayed.

Some IN:TOUCH soft key lines may vary slightly, depending on cetain conditions. On the MAIN soft key line, for example, soft key F1 is variously labelled HANGUP or DOS, depending on whether a telephone call is in progress.

When you press a soft key, the command represented by the corrresponding soft key label is executed immediately. For example, if you press the Dialer soft key on the MAIN soft key line, you immediately access the DIALER soft key line and see a display of thirteen dialer file entries.

All IN:TOUCH commands are normally entered using soft keys. Soft keys are also used for block cursor control.

If you have any questions about the commands available on a specific soft key line, use the HELP soft key. The IN:TOUCH soft key lines all contain the HELP command (soft key F10). Pressing the HELP soft key displays a screenful of information about the IN:TOUCH functions available on the current soft key line. Pressing Ctrl + HELP displays a "map" of all the soft key lines available in IN:TOUCH.

Fig. II-4 shows a soft key line as it appears on the Hyperion screeen. A quick reference to various IN:TOUCH soft key commands is given in the Quick Reference section.

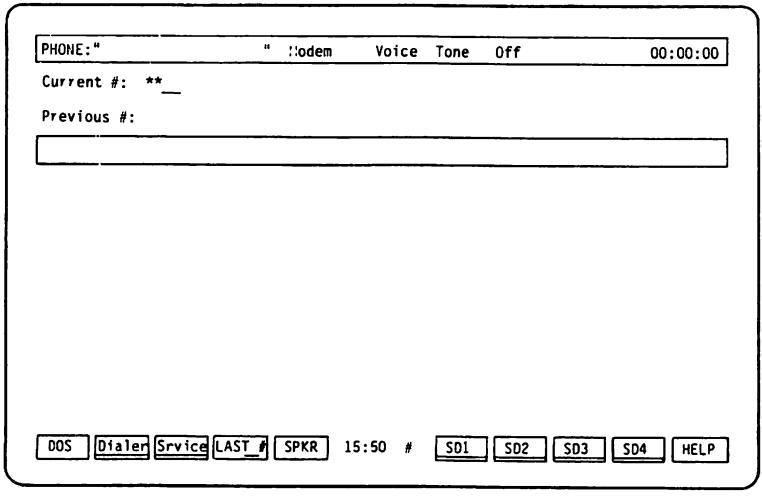


Fig. II-4 - The IN:TOUCH soft key label line.

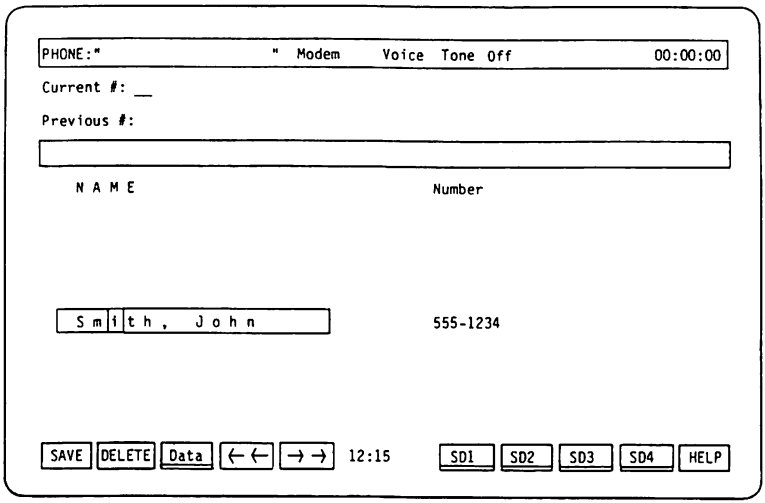


Fig. II-5 - The IN:TOUCH block cursor, with the editing cursor inside.

7. MOVING THE CURSOR ABOUT THE SCREEN

A cursor is a long or short bar of highlighting that is used to direct attention to a certain portion of the Hyperion screen. In IN:TOUCH, there are two cursors. The ***block cursor*** is a long horizontal bar which can be moved either through the dialer file, selecting entries for dialing or editing, or through a parameter table, selecting values.

Within the block cursor, a short flashing bar indicates the position of the ***editing cursor***. The editing cursor is your reference point for adding new characters or modifying existing characters within the block cursor.

The Block Cursor

The block cursor is normally controlled by the soft keys, or the **Tab** key. Whenever you reach an IN:TOUCH screen which uses block cursor movement, the soft key line will include cursor control keys. Pressing the appropriately labelled soft key moves the block cursor in the required direction.

The Editing Cursor

The editing cursor is moved using the cursor-number keypad at the right of the keyboard, as described in the ***Hyperion User Guide***. Ensure that the keypad is set to cursor control by pressing the **Num Lock** key until the octothorpe (#) disappears from the center of the soft key label line.

Because the editing cursor normally moves within the block cursor, the cursor-number keypad operates in a slightly different manner than that described in the Hyperion User Guide. The differences are noted in Tables II-A and II-B on the following pages.

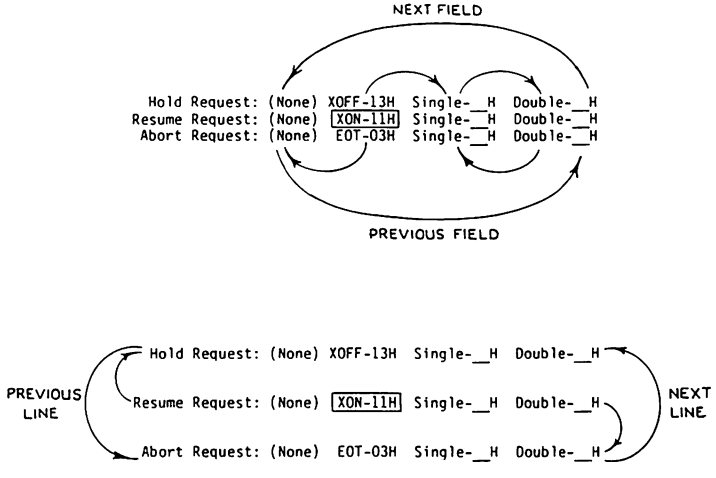


Fig. II-6 - Block cursor movement.

Table II-A
BLOCK CURSOR CONTROL

KEY	FUNCTION
USING SOFT KEYS	
→ →	(Next Field) Move the block to the next field on the current line. If the block cursor is at the right-most field, it moves to the left-most field on the current line.
← ←	(Previous Field) Move the block cursor to the previous field on the curent line. If the block cursor is at the left-most field, it moves to the right-most field on the current line.
↑ ↑	(Previous line) ***In a table***: Move the block cursor to the previous line. If the cursor is at the top line on the screen, it moves to the botttom line. ***In the dialer file***: Move the previous dialer entry down to the block cursor.
↓ ↓	(Next Line) ***In a table***: Move the block cursor to the next line. If the cursor is at the bottoim line on the screen, it moves to the top line. ***In the dialer file***: Move the next dialer entry up to the block cursor.

...continued

Table II-A (cont)
BLOCK CURSOR CONTROL

KEY	FUNCTION
USING THE CURSOR-NUMBER KEYPAD	
→	the editing cursor is not in use (i.e., does not appear on the Hyperion screen), this key may be used as an alternative to the →→ soft key.
←	the editing cursor is not in use (i.e., does not appear on the Hyperion screeen), this key may be used as an alternative to the ←← soft key.
↑	(Previous Line) This key may be used as an alternative to the ↑↑ soft key.
↓	(Next Line) This key may be used as an alternative to the ↓↓ soft key.
USING OTHER KEYBOARD KEYS	
Space Bar	If the editing cursor is not in use (i.e., does not appear on the Hyperion screen) , this key may be used as an alternative to the →→ soft key.
Rub Out	If the editing cursor is not in use (i.e., does not apppear on the Hyperion screen), this key may be used as an alternative to the ←← soft key.
Tab	***When adding or modifying a dialer entry***, this key may be used as an alternative to the →→ soft key.
	When working in a table, this key may be used as an alternative to the ←← soft key.

Table II-B
CURSER CURSOR CONTROL

KEY	FUNCTION
USING THE CURSOR-NUMBER KEYPAD	
→	(Next Character) Move the editing cursor to the next character position in the block cursor. If the editing cursor is at the right-most character position, it moves to the left-most character position.
←	(Previous Character) Move the editing cursor to the previous character in the block cursor. If the editing cursor is at the left-most character position, it moves to the right-most character position.
Home	(Front of Block Cursor) Move the editing cursor to the left most character position in the block cursor.
End	Delete to end of Block Cursor) Delete all characters from the current editing cursor position to the end of the block cursor. **Note that this function is completely different from that performed by the same key in IN:SCRIBE.**
Del	(Delete Character) Delete the character at the current editing cursor position, pulling all subsequent characters within the block cursor to the left.
Ins	(Insert Space) Insert a space at the current editing cursor position, pushing all subsequent characters within the block cursor to the right. If all character positions are full, pressing this key has no effect.

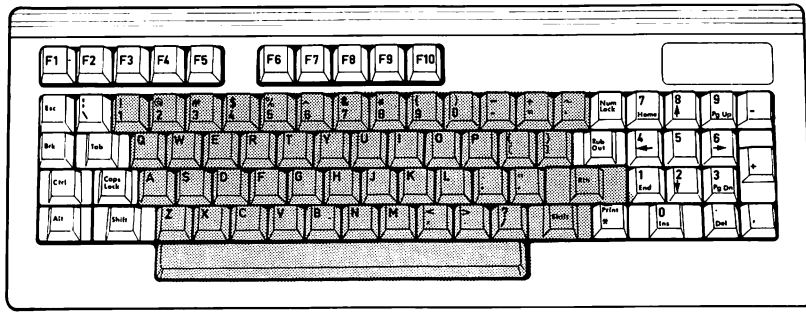


Fig. II-7 - The Hyperion keyboard, showing the special keys.

8. SPECIAL KEYS USED IN IN:TOUCH

The Hyperion keyboard is your means of inputting dialer entries. The special keys (shown in Fig. II-7) enter the commands which modify or dial those entries. Some special keys enhance and/or alter the functions of other keys.

The special keys are gathered in three groups: to the left, to the right, and above the alphanumeric section of the keyboard.

Table II-C
SPECIAL KEYBOARD KEYS

KEY	FUNCTION
ABOVE THE ALPHANUMERIC KEYBOARD	
F1 to F10	(The Soft Keys) These keys are normally the only means of entering IN:TOUCH commands. The command performed depends on the soft key label line displayed at the bottom of the screen. To enter a command, press the soft key which corresponds to the appropriate label. Entering a command may cause a dialing or editing operation to take place, and/or a new set of soft key labels to be displayed.
LEFT-HAND SPECIAL KEYS	
Esc	(Cancel) This key cancels the current screen, as well as any editing operation that is in progress, and returns to a previous screen and soft key line. Esc would typically be used to leave a soft key line without performing the action for which the line was originally acccessed.
Ctrl + Brk	(Cancel Find) Pressing these keys simultaneously cancels the dialer file search currently in progress.
Tab	(Cursor Control) This key may be used as an alternative cursor control key.

...continued

Table II-C (cont)
SPECIAL KEYBOARD KEYS

KEY	FUNCTION
Cap Lock	Cap(itals) Lock is used to switch the alphabetic keys on the keyboard between upper and lower case. It is analogous to the shift lock key found on most typewriters, but has been renamed because only alphabetic characters are affected. The punctuation and numeric keys are not affected. When **Cap Lock** is in effect, an upwards arrow appears to the right of the time display in the middle of the soft key line.
Shift	This key enters the shifted value for any other key. When the keyboard is in normal (lower case) mode, holding the **Shift** key while pressing an alphabetic character enters the upper case value for that character. When the **Cap Lock** key has been used to force upper case operation, holding the **Shift** key while pressing an alphabetic character enters the lower case value. The **Shift** key has a similar effect on the numeric keypad in the presence and absence of a Num(erals) Lock, shifting between the digits and cursor control.
RIGHT-HAND SPECIAL KEYS	
Num Lock	Num(erals) Lock is used to switch the numeric keypad between numeric output and editing cursor control. It has no effect on the alphabetic portion of the keyboard. When **Num Lock** is in effect, an octothorpe (#) appears to the right of the time display in the middle of the soft key label line. When **Num Lock** is on, editing cursor control can be achieved by using the **Shift** key in conjunction with the numeric keypad.

...continued

Table II-C (cont)
SPECIAL KEYBOARD KEYS

KEY	FUNCTION
Rub Out	This key backspaces over and erase the characters directly to the left of the editing cursor. If the editing cursor is at the left-most position, striking this key has no effect. (Cursor Control) If the editing cursor is not in use (i.e., does not appear on the Hyperion screen), this key may be used as an alternative block cursor control key.
Rtn	The **Rtn** soft key may be used as an alternative to the FIND soft key from the DIALER soft key line.
Print *	This key enters an asterisk when used in IN:TOUCH.

9. THE DIALER FILE

The dialer file holds the telephone numbers and names which make up your personal telephone directory. An IN:TOUCH diskette may have only one dialer file, but this dialer file may hold as many entries as will fit onto the diskette.

IN:TOUCH enables you to add, edit, or delete entries in the dialer file. Also, you may have the system automatically dial out any dialer file telephone number, including data numbers and sign-on code sequences.

10. DIFFERENT WAYS OF PLACING A CALL

Using the Hyperion expands the number of ways you can place a call, as well as enables you to use the Hyperion to transmit data calls.

* You can lift up your handset and dial the call from the telephone, as you would without a Hyperion.

* You can lift the handset and use the Hyperion number keypad to dial the call.

* You can highlight a telephone number entry in the dialer file, and press the SPKR soft key. The call is then automatically dialed out.

* You can store any of 40 different numbers in "speed dialers". Entries stored in speed dialers are displayed as soft key labels, and can be dialed out by pressing the appropriate soft key.

Data Calls

Both data and voice calls can be made in any of the four ways. Data calls, however, require the entry of additional information to make sure that the data is transmitted in a form that the destination device recognizes. These data call parameters, as this information is called, can be entered before the call is placed, after the call is placed, or can be stored separately for each data call number in the dialer file or speed dialers.

11. THE DIFFERENCE BETWEEN VOICE AND DATA CALLS

During a voice call, you lift the telephone receiver and converse with whomever you have dialed. During a data call, the Hyperion is "conversing" with a remote device. The nature of the signals (data) being exchanged by the machines demands special handling.

The telephone receiver should not be lifted during a data call. Lifting the receiver causes noise which interferes with the signals being exchanged. You do, however, hear the data call as it is being dialed and answered - via the Hyperion speaker.

Once a carrier tone (high-pitched whistle) is detected, the speaker is automatically turned off. The IN:TOUCH screen displays the first of a series of soft key lines used for data call management. There is no reason to audibly monitor the data signal.

Communication between the Hyperion and a remote device requires the use of a modem (***mod***ulator ***demo***dulator) to manage the signals being exchanged. The Hyperion has a built-in modem which can be set to handle the signal characteristics of almost any data service or device. External signal lines may be connected directly to the Hyperion or through (optional) accoustic cups.

The steps involved in dialing and managing a data call depend heavily on the nature of the remote device. For complete details on how to use IN:TOUCH for your data communications requirements, consult Part III, Section 6.

Part III

USING IN:TOUCH

1. INTRODUCTION

This part describes how to use all aspects of the IN-:TOUCH communications system in detail.

IN:TOUCH is an application-oriented system, rather than a software "language". Rather than having a series of command words used individually to enter instructions, IN:TOUCH has a series of definite uses. This part describes each use, also called an application, in the following way:

* ***Section 2*** describes configuring IN:TOUCH to match both your requirements and those for the local telephone system to which it is connected.

* ***Section 3*** describes the dialer file and its is maintenance.

* ***Section 4*** describes how to dial a number.

* ***Section 5*** shows how to use the speed dialer.

* ***Section 6*** describes data calls, how to set them up, how to dial them, how to terminate them, and gives details about using the Hyperion as a data terminal.

* ***Section 7*** describes terminal emulation and how to invoke terminal emulation.

* ***Section 8*** describes PHONECNV, a conversion program for files from ASCII to binary format.

Part III

Section 2

INITIAL CONFIGURATIONS

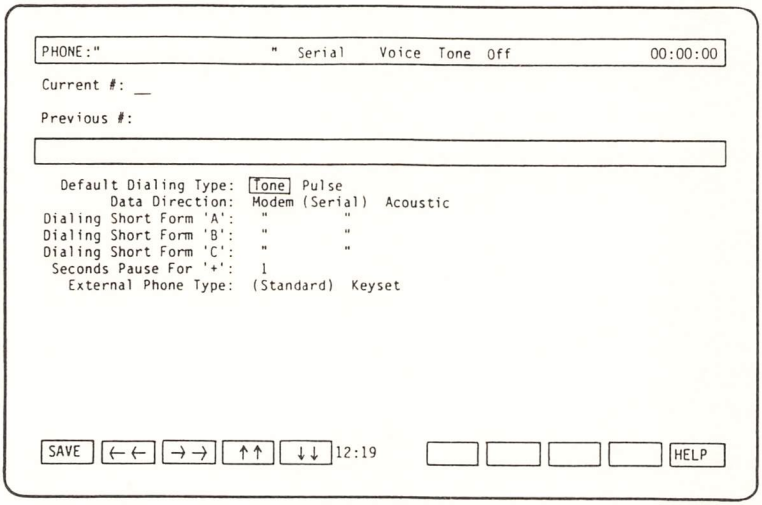


Fig. III-1 - The IN:TOUCH configuration table and CONFIGURATION soft key line.

Section 2

INITIAL CONFIGURATIONS

2.1 MATCHING THE TELEPHONE NETWORK

Before you begin placing calls using IN:TOUCH, you must ensure that the Hyperion configuration matches that of the telephone you are working from.

In the highlighted bar at the top of the IN:TOUCH screen four words appear. The words are reminders of your current Hyperion configuration.

The first word is one of **Modem**, **Serial**, **Acoustic**; the second word is either **Data** or **Voice**; the third word is either **Pulse** or **Tone**. The fourth word refers to the level of speaker volume - **Off**, **Low**, **Med**, **High**, **Max**. Initially, these are set to read: Serial, Voice, Tone, Off.

To set, or reset, these and other configuration parameters:

STEP

1) Access the IN:TOUCH screen and the MAIN IN:TOUCH soft key line.

2) Press **F3**, the ***Srvice*** soft key to access the SERVICE soft key line.

3) Press **F8**, the CONFIG soft key.

...continued

The IN:TOUCH configuration table (Fig. III-1) appears on the screen, with a block cursor (bar of highlighting) located on the first line. Notice that the associated soft key line (CONFIGURATION soft key line) contains four labels consisting of double arrows. The corresponding soft keys control the block cursor, moving it in the directions indicated: left, right, up and down.

STEP (cont)

3) Using the cursor control soft keys, move the highlight left and right, up and down, selecting each item (the purposes are described in Table III-A).

 Moving the cursor to another line in the configuration table sets the most recently highlighted item on the previous line. The system encloses this item in parentheses as shown in Fig. III-2.

4) When all the items have been selected, Press **F1**, the SAVE soft key.

5) Press **F1**, the ***Main*** soft key.

You are now back to the main IN:TOUCH screen. If you changed the dialing type (Pulse or Tone), notice that the third word at the top of the screen has also been changed accordingly.

Note that spoken volume is controlled by repeatedly pressing the VOLUME key while a call is in progress. (Refer to Part III, Section 2.2).

Table III-A
CONFIGURATION PARAMETER SETTINGS

PARAMETER	MEANING
Default Dialing Type	(Tone) for DIGITONE-type telsets; (Pulse) for regular pulse telsets.
Data Direction	(Modem) if data is being tranferred through a modem connected to the Hyperion; (Serial) if the data is being sent via the serial port at the back of the Hyperion. (Acoustic) if the data is being sent through a telephone line. This parameter concerns data communica- tion only (see Part III, Section 6)
Dialing Short Form	Enter the sequence of numbers that A, B, and C are to represent. These are usually exchange or area codes that repeat themselves.
Seconds Pause For '+'	Enter the number of seconds pause that the plus sign (+) is to represent.
External Phone Type	(Standard) if the telset is standard; (Keyset) if the telset is a keyset.

2.2 ADJUSTING THE HYPERION SPEAKER VOLUME

The Hyperion speaker is used to monitor dialing and ringing. It is turned on automatically whenever the system begins dialing a call, and is turned off automatically once the telephone receiver is lifted.

Whenever the speaker is in operation, you may adjust its volume.

STEP

1) Access the MAIN soft key line.

2) Press the **SPKR** soft key (**F5**). You will now hear a dial tone.

 Note that the **F5** soft key label has changed. It now reads **VOLUME**.

3) Press the **VOLUME** soft key.

Each time the **VOLUME** soft key is struck, the speaker volume is slightly increased in the increments: **Off**, **Low**, **Med**, **High**, and **Max**. The appropriate label appears in the top highlighted line of the IN:TOUCH screen.

When the volume has reached its loudest point, pressing the **VOLUME** soft key once more turns the speaker off. Pressing the volume speaker again will recommence the volume cycle (Low, Med, High, Max).

STEP

4) When the desired dial tone volume has been reached, press **F1** (HANGUP). This redisplays the MAIN soft key line.

Speaker volume may be adjusted at any time by pressing the VOLUME soft key. The VOLUME soft key appears each time a call is in progress.

2.3 TIMING THE CALL

The call timer is displayed at the top right-hand corner of the Hyperion screen. This clock restarts timing from zero whenever you begin dialing a call. It stops timing when the call is terminated (HANGUP) The last recorded elapsed time is displayed until you begin dialing another call.

The call timer is useful for timing long distance calls, or time on a data service. However, long distance charges do not include dialing and ringing time. If you wish to eliminate dialing and ringing time from the elapsed time recorded for any call, you may do so from the MAIN/DIALER SERVICE soft key line.

STEP

1) Press the ***Srvice*** soft key from either the MAIN or DIALER soft key line.

2) Press the **TIMSET** soft key. This immediately resets the call timer to zero.

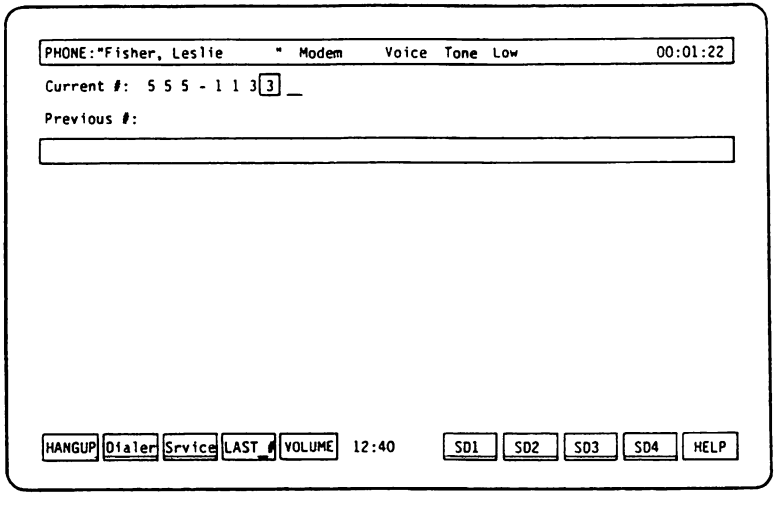


Fig. III-2 - The SERVICE soft key line.

Part III

Section 3

MAINTAINING THE DIALER FILE

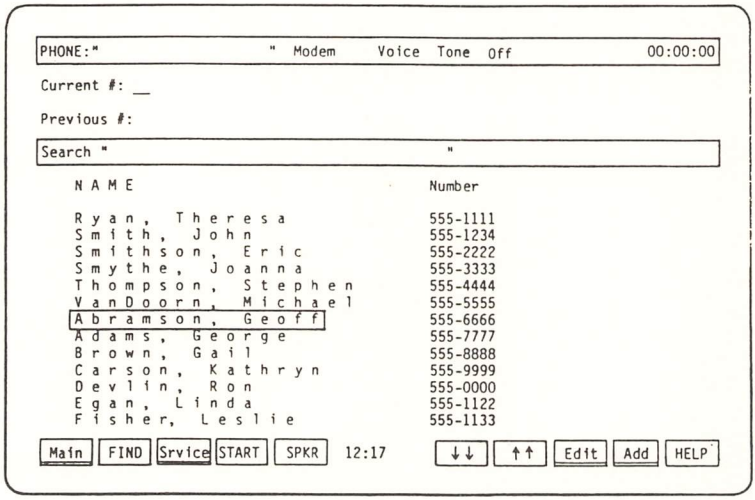


Fig. III-3 - The DIALER soft key line, with the dialer file displayed.

Section 3

MAINTAINING THE DIALER FILE

IN:TOUCH allows you to create a personal telephone directory, called a dialer file, in which you can store telephone numbers (and, for data calls, their associated parameters) for reference and automatic dialing. Each name and telephone number you place in your dialer file is called an ***entry***.

An IN:TOUCH diskette may contain only one dialer file. The dialer file holds as many entries as will fit onto the diskette. Typically, a diskette which contains only IN:TOUCH can hold approximately 3,000 dialer file entries.

3.1 ACCESSING THE DIALER FILE

STEP

1) Press the ***Dialer*** soft key.

 This key is available from the MAIN soft key line (**F2**) or SERVICE soft key line (**F1**).

Pressing the ***Dialer*** soft key accesses the DIALER soft key line, and displays 13 of your dialer file entries (see Fig. III-3). The first time you access your dialer file during an IN:TOUCH session, the block cursor appears at the first (alphabetical) entry in the dialer. Thereafter, when you return to the dialer, the block cursor reappears at its previous position.

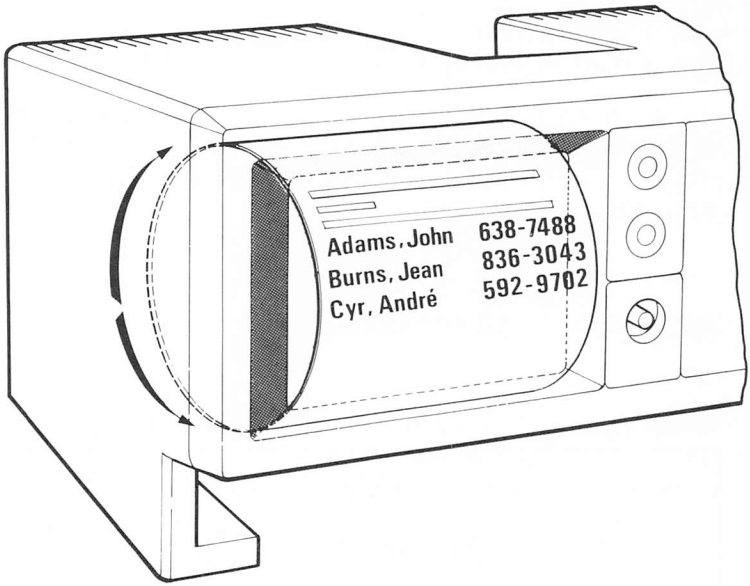


Fig. III-4 - Your dialer file may be thought of as resembling a large "wheel".

3.2 DIALER FILE ORDER

For your convenience, the Hyperion maintains and displays your dialer entries in alphabetical order. Whenever you add a new entry, it is automatically sorted, by name, into its alphabetical position within the dialer file. The entry "John Smith", for example, would be sorted into the "J" section. In order to be sorted into the "S" section, the entry should read "Smith, John".

As a rule, entries beginning with blanks precede entries beginning with digits; and entries beginning with digits precede entries beginning with letters. Digits appear in numerical order (0-9) and letters appear in alphabetical order (A-Z).

Your dialer file may be thought of as resembling a large wheel, rather like the rotary card indexes used in some offices. Each dialer file entry is placed in its correct alphabetical position on the circumference of the "wheel", and a small portion of the circumference (13 entries) is viewed through the dialer "window". (See Fig. III-4.)

When you are looking through your dialer file, it is as if you are "turning the wheel", moving a new portion of the circumference around to the dialer window. The block cursor remains stationary at the centre of the dialer window, highlighting whichever entry happens to appear there.

The "wheel" is exactly as large as the number of entries your dialer file contains. If you should move past the last (alphabetical) entry in the file, you immediately begin again at the first (alphabetical) entry.

3.3 NUMBERS AND SYMBOLS USED IN THE DIALER FILE

Because the telephone numbers in your dialer file are meant to be dialed automatically, IN:TOUCH provides a number of special symbols for handling typical dialing situations. These symbols are described in the following table.

Table III-B
NUMBERS AND SYMBOLS USED IN THE DIALER FILE

SYMBOL	FUNCTION
0 to 9	The digits of the telephone number.
- **(** **)** **blank**	The standard symbols used to break a telephone number into manageable groups - for example, area code, exchange, number: (613) 555-1234. These standard symbols have no effect on the IN:TOUCH automatic dialing feature.
+	Pause symbol. This causes a pause of one second or longer during automatic dialing. For example, this symbol would be used when dialing out from a PABX: 9+555-1234. The length of the pause is set using the configuration table (Table III-A). More than one pause may be entered in a telephone number.
, (comma)	Wait symbol. This causes an indefinite pause when operator confirmation is required before dialing can continue. When confirmation is received, pressing any key resumes automatic dialing.
# *	Standard Bell codes, equivalent to pressing the octothorpe (#) or asterisk (*) keys on a telephone with a numeric keypad.
T **P**	Symbols for tone (T) or pulse (P) dialing. If neither of these characters are used, IN:TOUCH uses the dialing type specified in the configuration table (Table III-A). If one of these characters (T or P) is used, then the new dialing type remains in effect until explicitly changed.

...continued

Table III-B (cont)
NUMBERS AND SYMBOLS USED IN THE DIALER FILE

SYMBOL	FUNCTION
A **B** **C**	Dialing abbreviations. Each abbreviation may be defined as representing up to ten dialing characters. Once set in the configuration table (Table III-A), the abbreviation may then be used to represent the character sequence in any dialer entry. For example, if A is defined as "9 + 1 + (416)", then "A 555-1234" is dialed as if it were written "9 + 1 + (416) 555-1234".
;	Start of comment. The number field of each dialer entry may contain comments in addition to the actual telephone number. The semi-colon is used to signal the end of the telephone number and the beginning of the comment. IN:TOUCH will dial only those characters preceding the semi-colon - for example, in the entry "9 + 555-1234; extension 987", IN:TOUCH stops dialing at the "4".

Example of How Symbols Are Used

Assume that:

a) **A** is defined as "9 + ";
b) **B** is defined as "P123456 + + " (i.e., an account code);
c) + is defined as a pause of one second;

and, the current, default dialing type is "**Tone**".

Then, the telephone number "A 555-9988,B T(514) 555-1234" causes the system to:

1) dial "9" using tones, then pause one second;
2) dial "555-9988" using tones, then pause until any key is struck;
3) dial "123456" using pulses, then pause two seconds;
4) and finally, dial "(514) 555-1234" using tones.

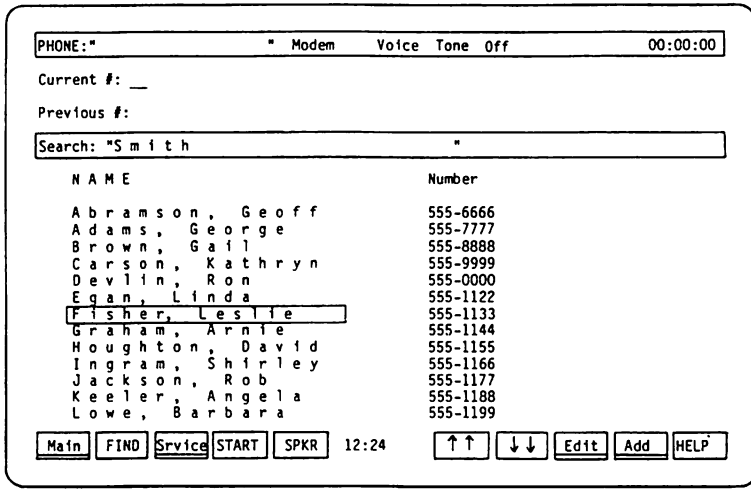


Fig. III-5 - Enter a search phrase on the search line to locate a specific dialer file entry.

3.4 VISIBLE AND INVISIBLE PARTS OF A DIALER FILE ENTRY

Each entry in the dialer file is made up of two parts: a "visible" portion, and an "invisible" portion. The ***visible portion*** of an entry is the name and telephone number. This is the portion displayed in the dialer window whenever the dialer file is accessed. The ***invisible portion*** of an entry is a table of modem parameters the Hyperion needs to know in order to place a data call to that entry. This information is displayed only on request, either when a new data telephone number is being entered, or when an existing data telephone number is being edited. See Section 6 for a full description of modem parameters. Parameters are not required when making voice calls.

3.5 LOCATING A DIALER FILE ENTRY

There are two ways to locate an entry in the dialer file: using the soft keys to ***scroll through the dialer***, or using the ***search line*** and the FIND soft key.

Two soft keys on the DIALER soft key label line are marked with cursor control symbols (▲▲ and ▼▼). Pressing these keys causes the dialer entries to scroll up or down past the block cursor in the centre of the dialer window. Pressing the START soft key causes the first (alphabetical) entry to be re-positioned at the block cursor.

STEP

1) Press either the ▲▲ or ▼▼ soft key, until the dialer file entry you seek is positioned at the block cursor.

Whenever the DIALER soft key line is in use, the label "Search:" appears on the left of the search line, together with a flashing editing cursor. To "search" for a dialer file entry, use the keyboard to type all, or part, of the entry name you are seeking. This ***search phrase*** is displayed on the search line.

STEP

2) Type the **name** of the entry you are seeking.

3) Press **F2** (FIND), or press Rtn.

Pressing the **FIND** soft key (or the **Rtn** key) locates the first dialer file entry which begins with the specified phrase, and positions that entry at the block cursor. Note that the beginning of the entry must ***exactly*** match the search phrase. For example, the search phrase "Smith" would match either "Smith, John" or "Smithson, Eric". However, the search phrase "Smith," would match only "Smith, John".

If you don't know the exact spelling of the name in the entry you wish to locate, you may perform a "wildcard" search. In a wildcard search, the wildcard symbol (*) must be used as the first character of the search phrase - for example, "*Smith". In this case, the wildcard symbol does not represent any particular number of characters; it simply directs the system to find the search phrase wherever it may appear in an entry name. The search phrase "*Smith", for example, would match either "Smith, John" or "John Smith".

Because wildcard searches must check every character of every entry name in looking for a match, they take considerably longer to complete than a regular search. Should you wish to stop any search that is in progress, press **Ctrl** + **Brk**.

Instead of a wildcard search, you may find it useful to use a regular search even if you are not sure of the spelling of the name. If there is no entry matching your search phrase, the entry which is alphabetically closest to your search phrase is moved to the block cursor. This places you near to where the required entry should appear in your dialer file. At this point, you can use the block cursor control keys to scroll through the dialer file looking for the required entry.

The system locates a matching entry no matter where the block cursor is initially located. If the block cursor is already positioned part way through your dialer file, the system begins the search from the current cursor position. If the system can find no match for your search string between the current cursor position and the end of the file, it continues to search from the start of the file, returning to the current cursor position.

Once the block cursor is positioned at the required entry, you may dial or modify that entry. (See Section 4 for a description of the dialing procedure.)

3.6 ADDING A DIALER FILE ENTRY

Pressing the ***Add*** soft key from the DIALER soft key line accesses the ADD/EDIT soft key line (Fig. III-6). This soft key line is used not only to modify dialer file entries, but also to add new entries to your dialer file.

When the ***Add*** soft key is pressed, you are presented with a blank entry into which to type the name and telephone number. The block cursor is initially positioned at the name field.

STEP

1) Press **F2**, the ***Dialer*** soft key to display your current dialer file.
2) With the block cursor in any position, press the ***Add*** soft key from the DIALER soft key line.
3) Type the **name** for the new entry.
4) Press the →→ soft key to move the block cursor to the number field, and type the telephone number.

Although the new entry appears on the Hyperion screen, it is not yet a part of your dialer file.

STEP

5) Press the **SAVE** soft key to finalize the entry.

OR

Press **Esc** to exit without adding anything to your dialer file.

Pressing the **SAVE** soft key completes the action of ADDing the entry to the dialer file. You are returned to the DIALER soft key line, where the block cursor is positioned at the new entry.

To leave the ADD/EDIT soft key line without ADDing the entry to your dialer file, press the **Esc** soft key. You are returned to the DIALER soft key line, but the new entry has been cancelled, and the block cursor reappears in its previous position.

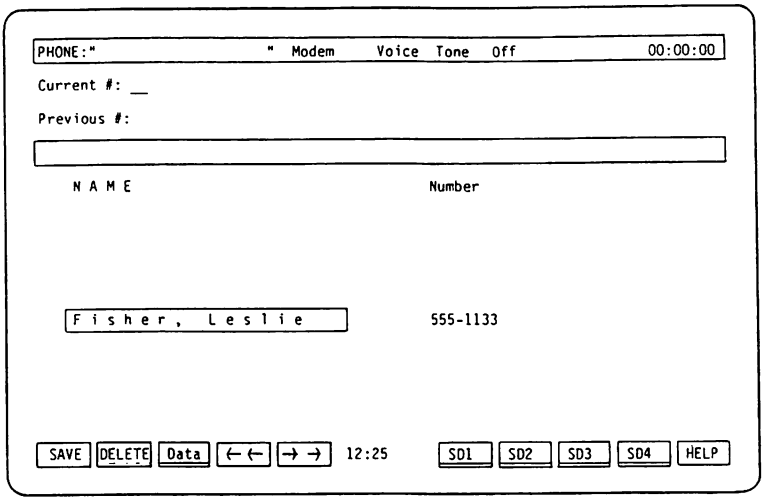


Fig. III-6 - The EDIT soft key line.

3.7 EDITING A DIALER FILE ENTRY

Pressing the ***Edit*** soft key from the DIALER soft key line also accesses the ADD/EDIT soft key line, but in this case, to modify dialer file entries.

When the ***Edit*** soft key is pressed, you are presented with the current dialer file entry, ready for modification. The block cursor is initially positioned at the name field.

STEP

1) From the DIALER soft key line, position the block cursor at the entry you wish to modify.
2) Press the ***Edit*** soft key.
3) Use the block cursor control keys, the editing cursor control keys and the keyboard to make the desired changes to the name and telephone number.

Although the changes to the entry appear on the Hyperion screen, they are not yet incorporated into your dialer file.

STEP

4) Press the **SAVE** soft key to finalize the changes.

 OR

 Press **Esc** to exit without making any changes.

Pressing the **SAVE** soft key completes the **EDIT**ing action. You are returned to the DIALER soft key line, where the block cursor is positioned at the edited entry.

To leave the ADD/EDIT soft key line without changing the current entry, press the **Esc** key. The block cursor reappears at the current entry, which looks exactly as it did before you began to EDIT.

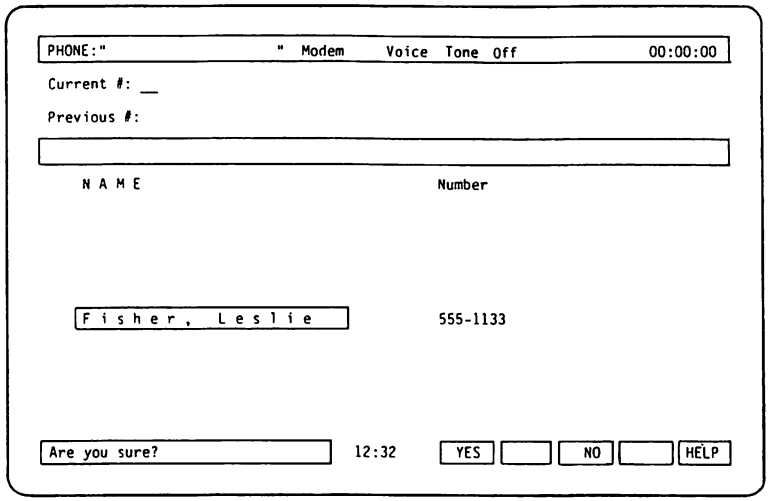


Fig. III-7 - The DELETE soft key asks **"Are you sure?"** before proceeding with the delete action.

3.8 DELETING A DIALER FILE ENTRY

Dialer file entries are deleted from the ADD/EDIT soft key line.

STEP

1) From the DIALER soft key line, position the block cursor at the entry to be deleted.

2) Press the **Edit** soft key.

3) Press the **DELETE** soft key.

 The soft key line now reads: "**Are you sure?**"

4) Press the **YES** soft key to complete the deletion and return to the DIALER soft key line.

 OR

 Press **No** or **Esc** to exit without deleting an entry.

The block cursor is now positioned at the dialer entry which followed (alphabetically) the deleted entry.

Pressing the **NO** soft key or the **Esc** key cancels the DELETE action and returns you to the EDIT soft key line. Press **Esc** a second time to return to the DIALER soft key line. The block cursor remains positioned at the current entry.

Part III

Section 4

DIALING A NUMBER

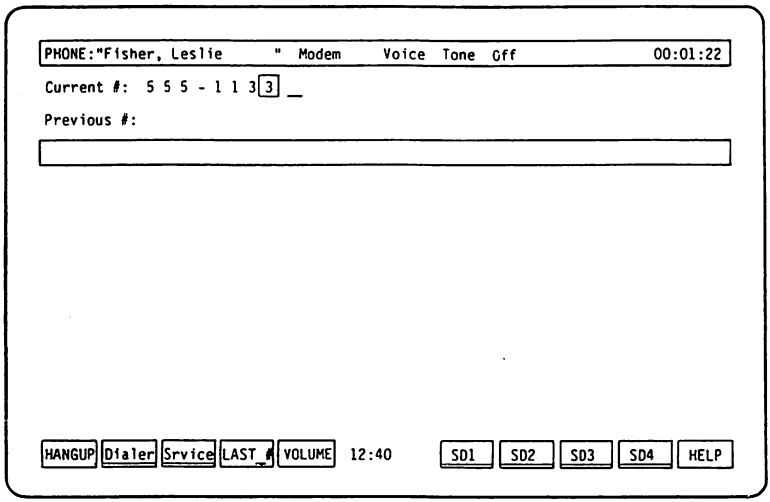


Fig. III-8 - The IN:TOUCH screen, as it appears when a call is in progress. Note the CALL ACTIVE soft key line.

Section 4

DIALING A NUMBER

4.1 USED AS A REGULAR TELEPHONE

You can continue to use your telephone in the normal manner when it is attached to the Hyperion. To dial a call, simply pick up your telephone handset and dial out the call from the telephone. However, you may, if you choose, also use the Hyperion.

4.2 USING THE HYPERION DIAL PAD

STEP

1) Press the **Num Lock** key until the octothorpe (#) appears in the center of the soft key line.

2) Using the numeric keypad, enter a 7-digit local number.

 Digits and the hyphen are all acceptable characters in a telephone number.

3) Press **F5** (SPKR) from the MAIN soft key line. You will hear the system begin dialing the number. The cursor moves across the number, highlighting each one as it is being dialed. Adjust the speaker volume by pressing **F5** (VOLUME).

4) When you hear the called party answer, pick up the telephone receiver to converse.

5) When the conversation ends, replace the receiver on the telephone to disconnect the call, or press **F1** (HANGUP).

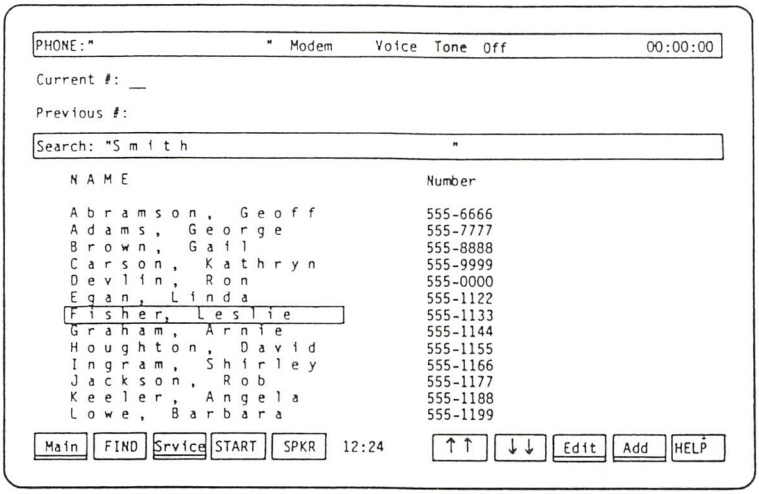


Fig. III-9 - The dialer file display and the DIALER soft key line.

4.3 AUTODIAL FROM THE DIALER FILE

Calls to numbers listed in only the main dialer file must be dialed from the DIALER soft key line.

STEP

1) Access the dialer file display.

2) Position the block cursor at the entry you wish to call. The number dialed will be the one associated with the entry.

3) Press **F5** (SPKR), or lift the telephone receiver. The system dials the call.

4) When the called party responds, lift the telephone receiver (if you have not already done so) and begin your conversation.

5) When the conversation ends, replace the receiver on the telephone to disconnect the call.

OR

If you wish to terminate the call without replacing the receiver, press **F1** (HANGUP).

Pressing the **SPKR** soft key copies the selected number to the "**Current #**" line, turns the Hyperion speaker on, and begins dialing the call. There is no need to lift the telephone receiver until the call is answered. You hear either tones or pulses from the speaker as the number is dialed.

At this point, you may press any soft key and continue to work with IN:TOUCH: searching, adding, editing, or deleting entries. Once you have picked up the receiver, you may even exit IN:TOUCH and return to DOS if you wish.

When the called party answers, pick up the telephone receiver (if you have not already done so) and begin your conversation. If the called party does not respond, or when your conversation ends, replace the receiver to disconnect the call.

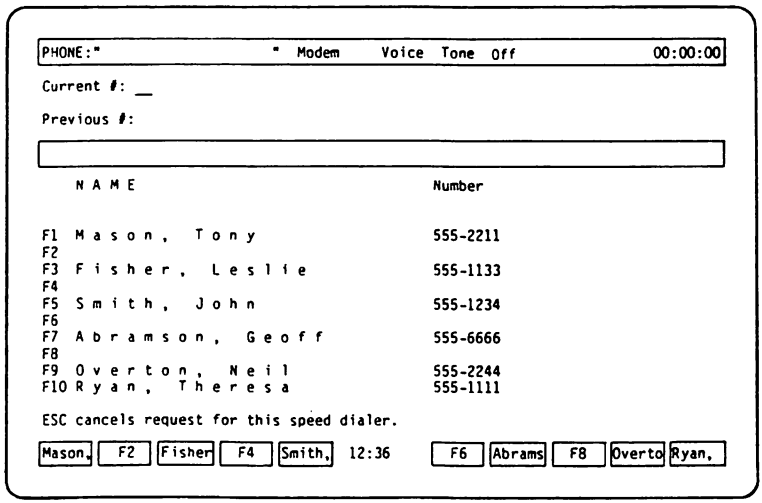


Fig. III-10 - Any one of ten speed dialer entries can be dialed with one keystroke.

Data Calls

Although data calls can be dialed automatically from the dialer file, the corresponding modem parameters must have already been set for the call, or they can be set manually after having selected the data call number from the dialer file. The procedures for doing this are described in Section 6.

4.4 SPEED DIALING A CALL

Calls to numbers listed in a speed dialer can be dialed from that speed dialer's soft key line, as well as from the DIALER line.

STEP

1) From any soft key line that displays the four available speed dialers (MAIN, ADD/EDIT, CONFIGURATION) press a speed dialer soft key (**F6** through **F9**, labelled **SD1** through **SD4**, or with labels of your own definition).

2) Press a soft key (**F1** through **F10**) to dial the entry on the corresponding line of the speed dialer.

3) Proceed as for a call placed from the dialer file.

Pressing one of the speed dialer soft keys (**SD1** through **SD4**) instantly displays the contents of the selected speed dialer (Fig. III-11). Pressing the soft key which corresponds to the required number adds that number to the "**Current #:**" line, turns the Hyperion speaker on, and begins dialing the call. You hear the dialing tones or pulses as the call is dialed. From this point, the call proceeds exactly as a main dialer file call.

4.5 REDIALING

When an IN:TOUCH-dialed call is disconnected, the called number moves from the "**Current #:**" line to the "**Previous #:**" line. From the MAIN soft key line, the "previous" number can be re-dialed automatically.

STEP

1) Press the **LAST_#** soft key from the MAIN soft key line.
2) Proceed as for a call placed from the dialer file entry.

Pressing the **LAST_#** soft key copies the "previous" number to the "**Current #:**" line, turns the Hyperion speaker on, and begins dialing the call. You hear the dialing tones or pulses as the call is dialed. From this point, the call proceeds exactly as a main dialer file call.

4.6 OTHER WAYS TO DIAL VOICE CALLS

Combination Dialing

IN:TOUCH allows you to combine various methods of dialing. For example, you are travelling and wish to place a long distance call to a "local" number from your dialer file. From the MAIN soft key line, use the Hyperion keyboarrd or numeric pad to enter the digit 1, plus the required area code. Next, go to your dialer file or a speed dialer and select the seven-digit number you wish to dial. IN:TOUCH copies the selected number beside the previously entered area code, turns the Hyperion speaker on, and begins dialing the call, starting with the digit 1.

The **NEWNUM** key on the MAIN/DIALER SERVICE soft key line provides another special dialing facility. Pressing this key causes the number shown on the "**Current #:**" line to be erased without disconnecting the telephone call in progress. A new number may then be entered on this line using the keyboard or numeric pad. To dial the new number, press the **SPKR** soft key, or replace the receiver on the telephone and lift it once again.

4.7 USING THE HYPERION WHILE CONVERSING

Once your call has been connected, and if you have made the call in the regular way (i.e., by using the telephone dial pad to dial the call), then you may continue using the Hyperion systems via the keyboard and soft keys, as before.

4.8 TURNING THE SPEAKER ON/OFF

You may dial out without lifting the handset. In this case, once you press the SPKR soft key, the sounds are transmitted via the Hyperion speaker.

Lifting the handset (going "off-hook") turns the speaker off. Dial tones, and the conversation on the line, can no longer be heard from the Hyperion.

To turn the speaker back on, press **F1** (the HANGUP soft key). This will not disconnect your call. The conversation, however, will be transmitted by the Hyperion speaker and be therefore audible to all those in the vicinity.

To terminate the call, replace the handset.

Part III

Section 5

USING THE SPEED DIALER

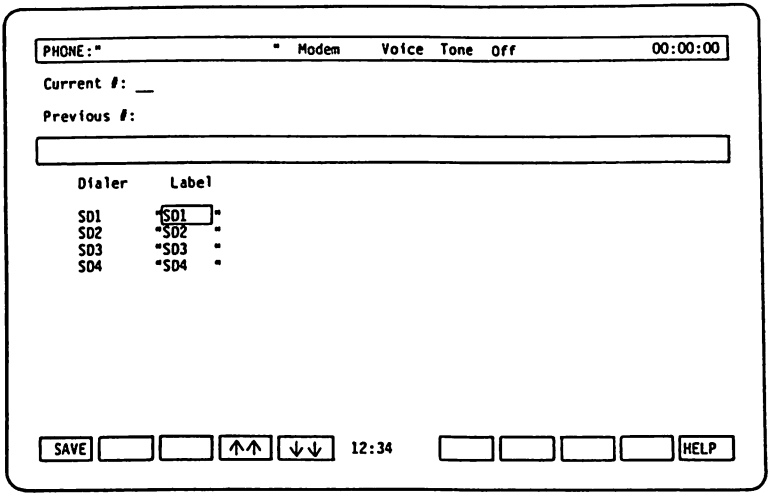


Fig. III-11 - The four speed dialer soft key labels may be changed from the LABELS soft key line.

Section 5

USING THE SPEED DIALER

The IN:TOUCH speed dialers are extensions of the main dialer file. Speed dialers permit fast, one-key access to frequently-used numbers. Four speed dialers are available, each of which can contain 10 entries.

5.1 SOFT KEY LABELS FOR THE FOUR SPEED DIALERS

Initially, the soft keys used to access the speed dialers are labelled **SD1**, **SD2**, **SD3**, and **SD4**. Those are the labels used in this manual. However, you have the option of giving the speed dialers more meaningful labels. You may define new labels, up to six characters long, by accessing the LABELS soft key line.

STEP

1) Press **F3** (*Srvice*) from the MAIN soft key line. This displays the SERVICE soft key line.

2) Press **F6** (LABELS).

 The four speed dialer labels are displayed, together with the LABELS soft key line.

3) Use the cursor control soft keys to position the block cursor at the label to be changed.

4) Type the new label.

5) Repeat for the other three labels, if desired.

6) Press **F1** (SAVE) to finalize the new label(s). You are returned to the SERVICE soft key line.

 OR

 Press **Esc** to exit without changing any labels. This erases the labels display and redisplays the SERVICE soft key line.

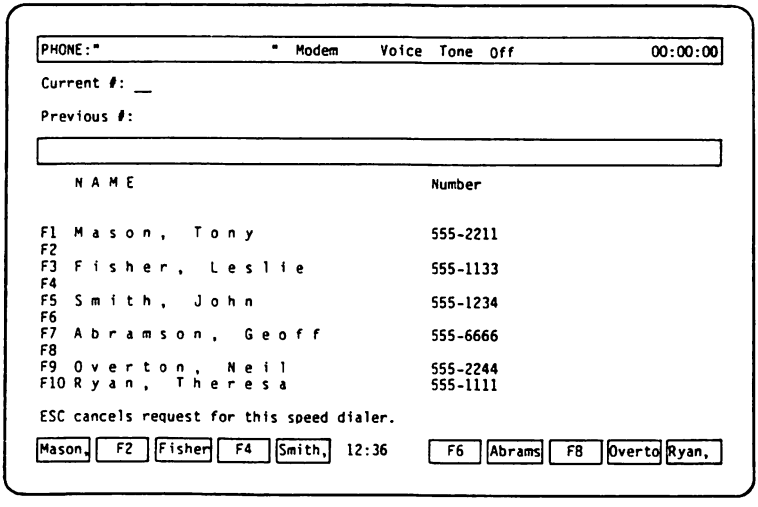


Fig. III-12 - The contents of a speed dialer. Note that each entry has a corresponding soft key label.

5.2 SPEED DIALER DISPLAY SCREEN

Speed dialers are displayed from the MAIN soft key line.

STEP

1) Press a speed dialer soft key (**F6** through **F9**, labelled **SD1** through **SD4**, or with labels of your own definition) from the MAIN soft key line.

You are ready to dial a call to any of the ten entries. (See Section 4 for a description of the dialing function.)

STEP

2) Press the soft key that corresponds to the number you wish to dial.

 The system dials the number.

 OR

 Press **Esc** to redisplay the MAIN soft key line without dialing any number.

5.3 SOFT KEY LABELS FOR THE TEN SPEED DIALER ENTRIES

The soft keys for the SPEED DIALER and ADD TO SPEED DIALER soft key lines are initially labelled **F1**, **F2**, **F3**, and so on, up to **F10**. However, once names and telephone numbers are placed into the speed dialers, the labels for these soft key lines are automatically taken from the name fields of the corresponding entries. Each label uses the shorter of: the first six characters in the name field; or the characters up to the first blank in the name field. For example, if the entry at **F1** in Speed Dialer 1 is "Smith, John", the label for soft key **F1** will read "Smith,". (See Fig. III-12.)

5.3 ADDING A NEW ENTRY TO A SPEED DIALER

To add an entry to a speed dialer, that entry must first exist in the main dialer file. Therefore, to add an entry to a speed dialer, you must first add it to the dialer file.

STEP

1) Press F2 (***Dialer***) from the MAIN soft key line. This accesses the dialer file and the DIALER soft key line.

2) For a new entry, press the ***Add*** soft key. Otherwise, position the block cursor to the desired entry in the main dialer file and press the ***Edit*** soft key.

 The highlighted entry is isolated and the ADD/EDIT soft key line appears.

3) Type the new name and telephone number or modify the existing name and number, if necessary.

The new or existing entry is now ready to be added to a speed dialer.

STEP

4) Press a speed dialer soft key (**F6** through **F9**, labelled **SD1** through **SD4**, or with labels of your own definition) to display the selected speed dialer.

...continued

STEP

5) Press a soft key (**F1** through **F10**) to mark the speed dialer line on which you wish to place the current entry.

OR

Press **Esc**.

The item is redisplayed, together with the ADD/EDIT soft key line.

If there already was an entry in the speed dialer item you selected, "**Are you sure**?" appears on the soft key line (Fig. III-13). Press the **YES** soft key to mark the line. Pressing the **NO** soft key or the **Esc** key returns you to the ADD/EDIT soft key line without marking any line.

Although the speed dialer display disappears, the system has marked the line on which the current entry is to be placed. However, the entry has not yet been added to the speed dialer.

STEP

6) Press F1 (**SAVE**) to finalize all of your actions: **ADD**ing the new entry; **EDIT**ing the existing entry; or replacing an existing entry.

The dialer file and DIALER soft key line are redisplayed.

Pressing the **Esc** key, instead of **SAVE**, cancels all of the above actions and returns you to the dialer file and DIALER soft key line.

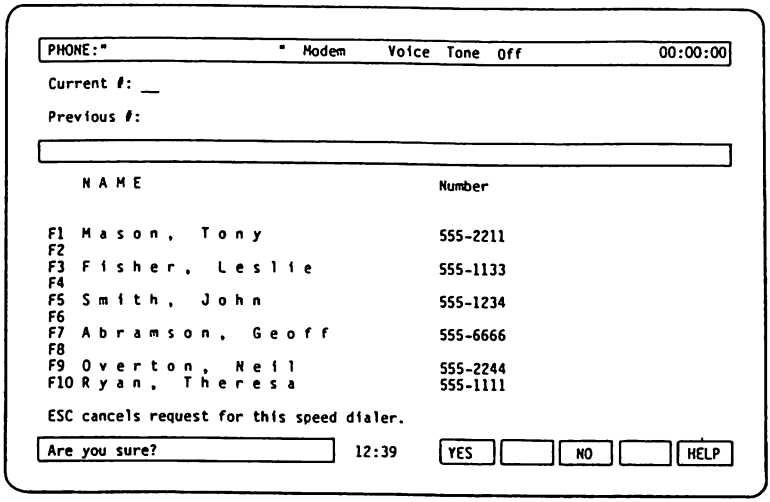


Fig. III-13 - Before replacing a speed dialer entry, the system asks: "Are you sure?"

5.5 EDITING A SPEED DIALER ENTRY

Changes made to any main dialer file entry which also appears in a speed dialer are automatically reflected in that speed dialer.

5.6 DELETING A SPEED DIALER ENTRY

Any entry deleted from the main dialer file is automatically deleted from any speed dialer in which it appears. Any speed dialer entry which is replaced by a different entry is deleted from the speed dialer, but remains in the main dialer file.

Part III

Section 6

DATA CALLS

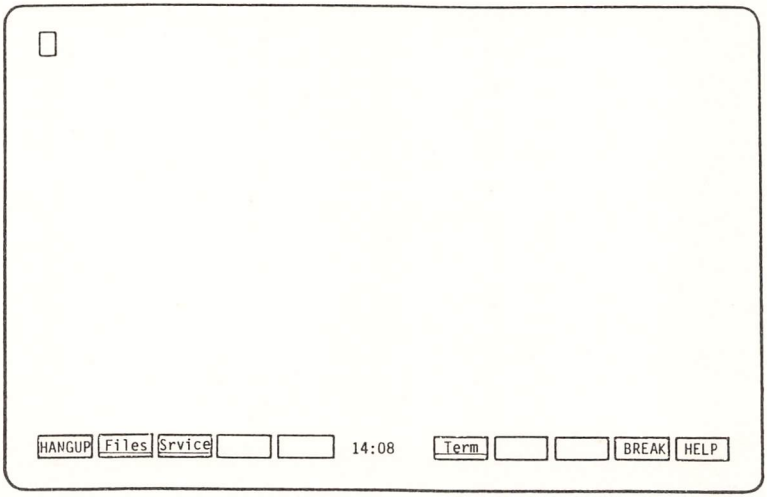


Fig. III-14 - The DATA soft key line. After the carrier tone is detected, the system erases the IN:TOUCH display and is ready to receive data.

Section 6

DATA CALLS

6.1 TYPES OF DATA CALLS

Using the Hyperion, you can send or receive data in several different ways:

1) You can dial a voice call, and then press the DATA soft key to change that voice call into a data call. These calls are known as "manual-data".

2) You can store data call numbers in the dialer file and, by accessing them, have the system automatically dial these numbers out for you. Such calls are known as "auto-data".

In both cases, the system needs to match the transmission parameters of the far-end device in order to be able to communicate with it. These transmission parameters (shown and described in Table III-C) may be set before making the data call, or may be stored separately for each data call number in the dialer file.

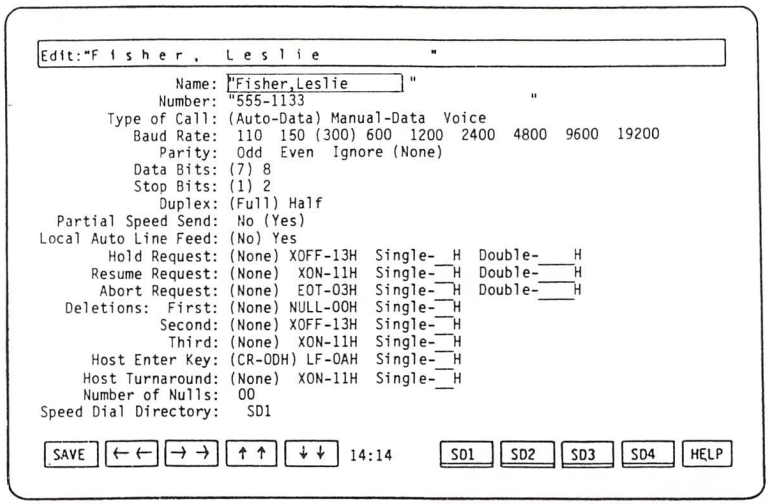


Fig. III-15 - The PARAMETERS soft key line, with the table of transmission parameters displayed, as they would be when assigning them to a dialer file entry.

6.2 ADDING A DATA CALL NUMBER TO THE DIALER FILE

The process of adding a data call number to the dialer file is twofold: add the name and number, then add the transmission parameters that pertain to that name and number.

STEP

1) Press **F2** (Dialer) from the MAIN soft key line. The dialer file and DIALER soft key line are displayed.

2) Press **F9** (Add). This displays a blank name and number field, and the ADD/EDIT soft key line (Fig. III-15).

3) Enter a name and telephone number.

4) Press **F3** (Data).

 This displays a table of transmission parameters, and the PARAMETERS soft key line.

5) Using the cursor movement (arrow) soft keys, and the information provided in Table III-D, select the appropriate transmission parameters.

6) Press **F1** (SAVE). The dialer file and DIALER soft key line are redisplayed, with the new entry entered at the block cursor position.

If you press **Esc**, instead of **SAVE**, the dialer file is redisplayed, but the data call number is not entered, and the transmission parameters are not selected.

6.3 THE DATA TRANSMISSION PARAMETERS

In international relations, the word "protocol" is used to express the formalities and rules governing communication. In data transfer, protocol means exactly the same thing: the rules governing "conversations" (exchange of signals) between two devices.

The language of the "conversation" is already fixed. This language is written in binary digits (more usually called "bits"), binary being a number system which uses only the digits 0 (off) and 1 (on). The "protocol" sets the other rules of the "conversation". For example, the machines must agree on how fast to "talk" (baud rate); how many bits constitute a "word" (data bits); and how "words" are distinguished from one another (stop bits). These are just a few of the formalities. Others include:

* ***Parity checking*** – a means of monitoring the "conversation" for loss or change in "meaning". The data bits are summed before transmission, and the result is transmitted in a parity bit which is checked against the data on receipt.

* ***Type of duplex*** – In full duplex, the remote device echoes everything "said" to it, sending the echo to appear on the local screen. In half duplex, the remote device assumes that the local machine can produce its own echo for the screen. If a machine is mistakenly in full duplex, two characters appear on the screen for each character typed; if mistakenly in half duplex, no characters appear.

* ***Local automatic line feed*** – similar to duplex, in that the remote and local devices must agree as to who is supplying the line feed following each carriage return. Usually, the host computer supplies the line feed. If it does not, the local machine must. If the remote device does not produce the line feed, and local auto line feed is not in effect, each new line of text sent from the host computer is printed directly over the last. Alternately, if the remote machine does produce its own line feed, and local auto line feed is in effect, each carriage return produces two line feeds. The line feeds produced by the local auto line feed feature are not transmitted to the remote device.

* ***Special-purpose hexadecimal codes*** – Hold, resume and abort requests (codes) cause the remote device to suspend, resume or prematurely end the current transmission. Deletions cause the local device to "ignore" certain codes in transmissions from the remote machine. The host enter key is a code which the remote device accepts as terminating a command or line of text (normally the carriage return). The two devices must agree on which codes will be used. These codes are expressed in hexadecimal, a number system which uses 16 "digits", 0 through 9, followed by A through F. Hexadecimal codes normally have two "digits" each, for a total of 256 possible codes.

* ***Null characters*** – used mainly for printers, allowing the device enough time to accomplish a line feed, form feed or page feed before more data is transmitted.

Even if the two devices do not use all of these parameters, they must ***agree*** not to use them. Setting transmission parameters is the most technical part of using a data service or contacting another microcomputer. If you should need to contact a service or computer which demands different settings, you will likely be provided with the necessary values.

The following table gives the parameters as they appear in the parameters table (Fig. III-15) for each dialer entry. The intial value of each parameter is also given.

Table III-C
DATA CALL NUMBER PARAMETERS

PARAMETER	FUNCTION
Name	The entry name as it will appear in the dialer file. This has no initial value; it must be individually keyed for each new entry created. An entry name consisting of spaces alone will not be accepted. (The name may be keyed from the ADD/EDIT soft key line.)

...continued

Table III-C (cont)
DATA CALL NUMBER PARAMETERS

PARAMETER	FUNCTION
Number	The telephone number of the entry as it will appear in the dialer file. This has no initial value; it must be individually keyed for each new entry created. (The number may be keyed from the ADD/EDIT soft key line.) A telephone number may consist of any of the following characters: - () + # * , ; **blank digits** **A B C T P**
Type of call	Choices are Auto-Data, Manual-Data and Voice. Initially, the call type is "**Voice**". Whenever this table is accessed, the "**Voice**" call type is automatically switched to "**Auto-Data**". When the call type is "**Voice**", all parameters except the name and telephone number are ignored. When the call type is "**Auto-Data**", and the data call is made, the transmission parameters that are set in this table take effect. When the call type is "**Manual-Data**", the call is intially treated as if the call type is "**Voice**". However, if the **DATA** soft key on the SERVICE soft key line is pressed, then the call is treated as if the call type is "**Auto-Data**", the transmission parameters that are set in this table take effect.
Baud Rate	Sets the speed of data transfer in bits per second. For a new entry, this value is taken from the current value in the MODEM table. Initially, this value is set to "**300**".
Parity	Determines whether the data is checked for parity bits. For a new entry, this value is taken from the current value in the MODEM table. Initially, this value is set to "**None**".

...continued

Table III-C (cont)
DATA CALL NUMBER PARAMETERS

PARAMETER	FUNCTION
Data Bits	Defines the number of data bits that define one "word" of data. Initially, this value is set to "**7**".
Stop Bits	Defines the number of stop bits which are used to frame the data "word". Initially, this value is set to "**1**".
Duplex	Defines whether local echo is used by the internal modem. Initially, this value is set to "**Full**".
Partial Speed Send	Cuts the speed of data transmission by one half. Initially, this value is set to "**Yes**".
Local Auto Line Feed	Defines whether a carriage return from the remote device also produces a line feed at the local screen. Initially, this value is set to "**No**".
Hold Request	Defines the signal which causes the remote device to hold data transmission. None, a standard value of 13H (hexadecimal), or a user-defined hexadecimal value (00 through FF) may be selected. Initially, this value is set to "**None**".
Resume Request	Defines the signal which causes the remote device to resume data transmission. None, a standard value of 11H (hexadecimal), or a user defined hexadecimal value (00 through FF) may be selected. Initially, this value is set to "**None**".

...continued

Table III-C (cont)
DATA CALL NUMBER PARAMETERS

PARAMETER	FUNCTION
Abort Request	Defines the signal which causes the remote device to abort data transmission. None, a standard value of 03H (***hex***adecimal), or a user-defined hexadecimal value (00 through FF) may be selected. Initially, this value is set to "**None**".
Deletions	Defines up to three characters (First, Second, Third) which will be stripped from incoming data. None, three pre-defined hexadecimal values (00, 13 and 11) or three user-defined hexadecimal values (00 through FF) may be selected. Initially, these values are set to "**None**".
Host Enter Key	Defines the signal which is transmitted to the remote device when the **Rtn** key is struck, or at the end of each line of text during a file transfer. The carriage return code (hexadecimal value 0D), the line feed code (hexadecimal value 0A) or a user-defined hexadecimal code (value 00 through FF) may be selected. Initially, this value is set to "**OD**" (for carriage return).
Number of Nulls	A decimal value which defines the number of null characters transmitted after a carriage return, line feed, or form feed is transmitted. Initially, this value is set to "**00**".
Host Turnaround	Defines the line turnaround character that the host sends to indicate that it has finished sending characters. At this point the Hyperion can send characters until the host enter key is sent, signalling a line turnaround to the host. The Hyperion will send no more data until a Host Turnaround character is received.
Speed Dial Directory	This parameter appears only when the current entry has been added to a speed dialer. This parameter shows the label of the speed dialer to which the entry belongs.

6.4 MANUALLY SETTING THE TRANSMISSION PARAMETERS

It is important to remember that the parameters table stored with a dialer file entry (Fig. III-15) is consulted only when that entry has a "Data" call type (automatic or manual).

When such a data call is made, the transmission parameters of the Hyperion are changed, and remain changed to the new values.

Transmission parameters may be reset manually at any time, even during a data call. To reset the transmission parameters:

STEP

1) Press **F3** (***Srvice***) from the MAIN, DIALER, DATA or FILES soft key line.

 The SERVICE soft key line is displayed.

2) Press **F7** (MODEM). The transmission table appears on the Hyperion screen (Fig. III-16).

3) Use the block cursor control keys to move the block cursor through the table of parameters, selecting appropriate values.

...continued

Where there is a choice of parameter values, the value in parentheses is the value in effect. To alter the value, move the block cursor left or right, to the desired value. The last location of the block cursor before it is moved to another line is the "selected" parameter value. When the cursor is moved to a new line, it appears at the "selected" value.

Although the manual changes to the parameter table appear on the Hyperion screen, they are not yet saved in the configuration file.

STEP

4) Press **F1** (SET) to finalize the new parameter values.

The new transmission parameters are now in effect, and remain so until they are reset either manually, or by dialing a new Auto-Data or Manual-Data call.

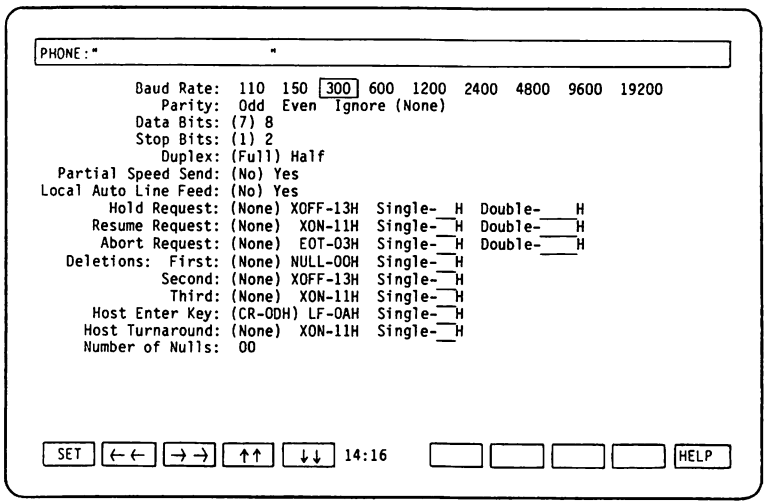


Fig. III-16 - The transmission parameters table that is displayed when resetting the parameters manually. Note that this display is the same as that in Fig. III-15, except for the **Name** and **Number** fields.

6.5 MAKING A DATA CALL

Using the Dialer and Speed Dialer Files

Once the appropriate transmission parameters are set, a data call may be placed using the Dialer or Speed Dialer in much the same way they are used for "Voice" calls.

STEP

1) Locate the number to be dialed on the dialer/ speed dialer file (see Section 2 and 3)

2) Press the **SPKR** soft key (**F5**). DO NOT PICK UP THE RECEIVER. The system dials out the data call, and accesses the remote device.

Signing On

To access most computers, you will need to go through a sign-on procedure. Section 6.7 outlines how you can have your Hyperion "learn" these procedures.

Uploading/Downloading Files

The procedures for uploading or downloading a file are contained in Section 6.9.

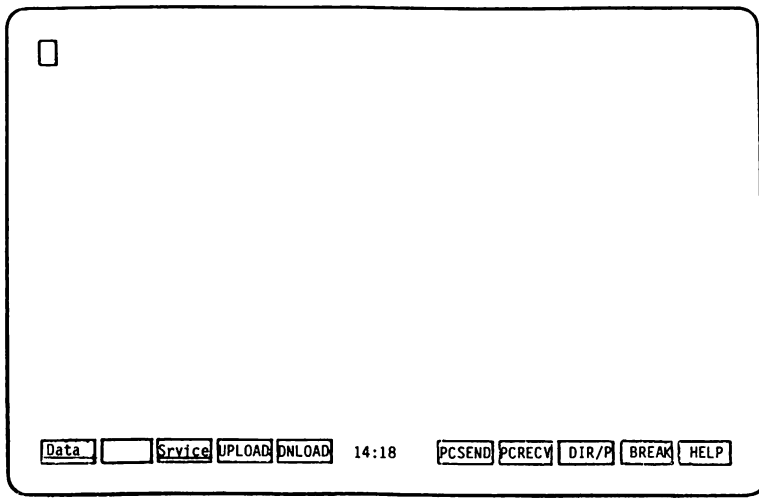


Fig. III-17 - The FILES soft key line.

6.6 TERMINATING THE DATA CALL

Disconnecting your data call automatically returns you to the MAIN soft key line.

STEP

1) Perform the normal sign-off sequence for the data service or host computer to which you are connected.

2) Press the **HANGUP** soft key (F1) from the DATA soft key line. You are automatically returned to the MAIN soft key line.

You may also end a data call, without disconnecting, by switching the call type to "**Voice**". This feature allows you to contact other microprocessor users, transfer data and converse during the same call.

STEP

1) Press the ***Srvice*** soft key (F3) from either the DATA or FILES soft key line. This displays the DATA SERVICE soft key line.

2) Press the **VOICE** soft key (F2).

3) Pick up the handset and start your conversation.

Pressing the ***Srvice*** soft key on either the DATA or FILES soft key line takes you to the DATA/FILES SERVICE soft key line. Pressing the **VOICE** soft key then switches the call type from "**Data**" to "**Voice**". You are automatically returned to the MAIN soft key line.

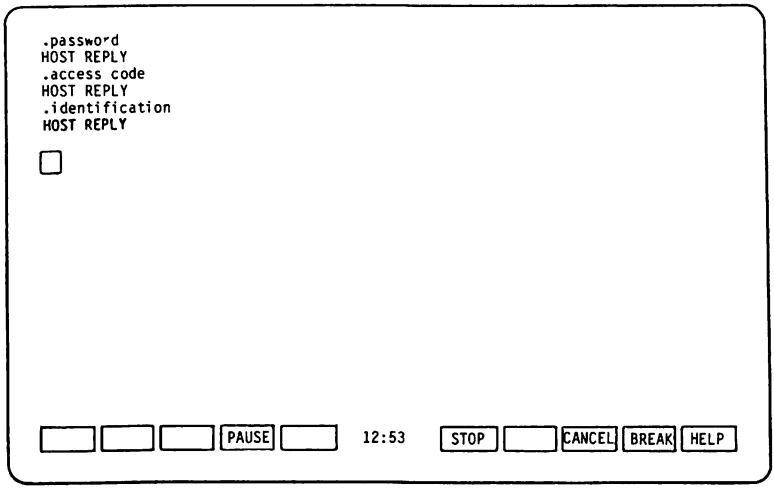


Fig. III-18 - The LEARN/RELEARN soft key line.

6.7 TEACHING YOUR HYPERION AN INPUT SEQUENCE

At any time during a data call, your Hyperion can "learn" a sequence of input lines. During subsequent calls to the same telephone number (if dialed from your dialer file), you may have the Hyperion "recall" that sequence, one line at a time.

For example, whenever you call a data service (or other host computer) you must normally complete a sign-on sequence in order to use that service. You can have your Hyperion "learn" the sign-on the first time you call the associated number. The sign-on is saved in your dialer file with that telephone number and, during future calls, may be "recalled" on request.

After dialing, or selecting, a data call:

STEP

1) Press the **SPKR** soft key (F5).

 The Hyperion establishes the call.

2) Once you are connected, press the **LEARN** soft key (F4) from the DATA soft key line.

3) Begin entering your sign-on sequence in the normal manner.

4) When you have completed the sign-on sequence, press the **STOP** soft key (F6).

Pressing the **LEARN** soft key accesses the LEARN/RELEARN soft key line (Fig. III-18). At this point the Hyperion begins to "learn" the characters you type.

Pressing the **STOP** soft key stops the "learning" and saves the "learned" sequence. Pressing the **CANCEL** soft key cancels the "learned" sequence. In either case, you are returned to the DATA soft key line.

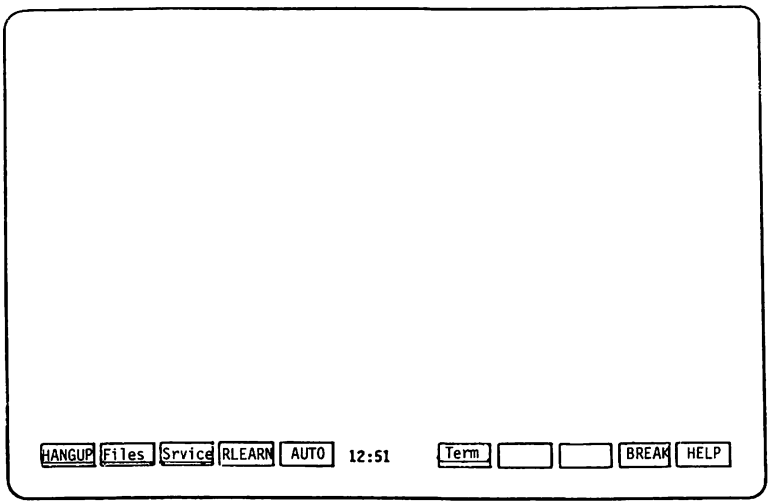


Fig. III-19 - The DATA soft key line as it appears when a "learned" sequence is saved with the current dialer file entry.

Entering "Pauses" Into a "Learned" Sequence

If there is some portion of the sequence you would prefer not to have the Hyperion "learn" - a private access code, for example - you may use the **PAUSE** soft key to suspend "learning" temporarily.

STEP

1) Press the **LEARN** soft key from the DATA soft key line, and begin entering your sequence.

2) When you reach a line or word which is private, press the **PAUSE** soft key (**F4**).

 Note that that soft key **F4** is now labelled "**RESUME**".

3) Type the private line or word, then press the **RESUME** soft key to resume "learning".

 Note that soft key **F4** is again labelled "**PAUSE**".

You may pause and resume as many times as necessary while "learning" a sequence. When the sequence is complete, press the **STOP** soft key to end "learning" and to save the "learned" sequence.

Changing a "Learned" Sequence

Note that when a "learned" sequence is stored with the current dialer file entry, the DATA soft key line changes (Fig. III-19). The "learning" soft key is labelled **RLEARN**, and a new label, **AUTO**, is added to the line.

Pressing the **RLEARN** soft key allows you to replace or delete a previously "learned" sequence. When the LEARN/RELEARN soft key line appears, either type in the new sequence and press the **STOP** soft key to save it, or type nothing and press **STOP** to delete the previous sequence. Pressing the **CANCEL** soft key cancels the new "learned" sequence, but does not affect the previously "learned" sequence, which remains stored with the current dialer file entry. You are returned to the DATA soft key line.

"Recalling" a "Learned" Sequence

To recall a "learned" sequence during the current call, press the **AUTO** soft key. The **AUTO** key must be struck once for each line in the sequence. This allows you to wait for the host computer to respond to each line, if necessary, before proceeding to the next.

STEP

1) Once you are connected to a data call for which you have a "learned" sequence saved, press the **AUTO** soft key to "recall" the first line of the sequence.

2) Press **AUTO** again to "recall" the next line. Repeat for each subsequent line in the sequence.

If you "paused" in the middle of a line while "learning" a sequence, the Hyperion will "pause" there while "recalling" it. Type the private word, or line, then press the **AUTO** key to continue "recalling" the sequence.

A sequence may be "recalled" only once during the same call. However, once you begin to "recall" a sequence, you are not obligated to continue. You may stop pressing AUTO at any time and begin entering commands or text manually. The next time you press **AUTO**, you will begin "recalling" the sequence from the point where you last left off.

6.8 USE THE HYPERION AS A DATA TERMINAL

Once you have called a data service, or other host computer, and received a carrier signal, the DATA soft key line appears. At the same time, the remainder of the Hyperion screen clears and a regular cursor appears in the upper left corner of the screen. Your Hyperion is now a TTY data terminal.

From this point, every character you type using the alphanumeric keyboard is transmitted to the host computer. You are no longer working with the Hyperion processor and diskette drives; your work is being processed and stored by the host computer.

The commands and text which you type, and the host computer responses, appear on the Hyperion screen. You can also obtain a permanent record of this ***terminal session***, if you wish.

STEP

1) Attach a compatible printer to your Hyperion. (See Part II, Section 2.)

2) Press **Ctrl** + **Print**.

Ctrl + **Print** causes a ***local printer echo***. This means that every character which appears on the terminal screen is repeated to your printer. This produces a "hard copy" of your terminal session.

Although the Hyperion is acting as a data terminal, IN:TOUCH is still available to perform special data management functions. While all the alphanumeric keys are transmitted to the host, the soft keys are not. Soft keys may be used to transfer files from your Hyperion diskettes to the host computer, and to store host computer files onto Hyperion diskettes. You may even consult your directory of files without disturbing your connection to the host computer.

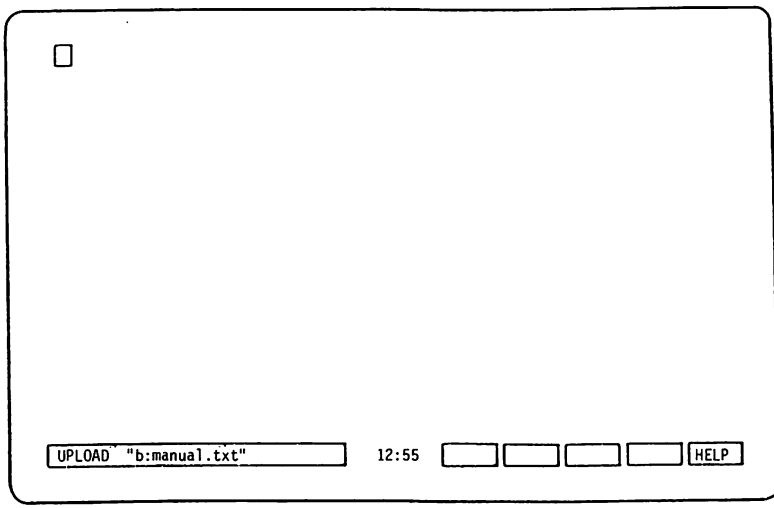


Fig. III-20 - The UPLOAD/PCSEND soft key line.

6.9 SEND AND RECEIVE FILES

Pressing the **FILES** soft key in the DATA soft key line accesses the FILES soft key line (Fig. III-21). This soft key line is used to transfer files to, or accept files from, a remote device. You may transfer files using either the protocol defined in your MODEM table, or the IBM PC protocol.

To send (UPLOAD) a file

STEP

1) From the FILES soft key line, press either the **UPLOAD** or **PCSEND** soft key. At this point, nothing you type is being transmitted to the host computer.

 UPLOAD transmits using the protocol currently defined in the MODEM table; **PCSEND** transmits using the IBM PC protocol. However, both keys access the same soft key line (Fig. III-22). Either "**UPLOAD**" or "**PCSEND**" appears on the left of the soft key line, depending on which key was used. Immediately following is a flashing editing cursor.

2) Type the drivespec of the diskette drive where the file is located (i.e., "**A:**", "**B:**").

3) Type the filespec of the file.

4) Press **Rtn**.

 At this point, transmission to the host computer resumes. The system finds the file and transmits it one line at a time, exactly as if you were typing it. The defined "enter" code is sent at the end of each line.

...continued

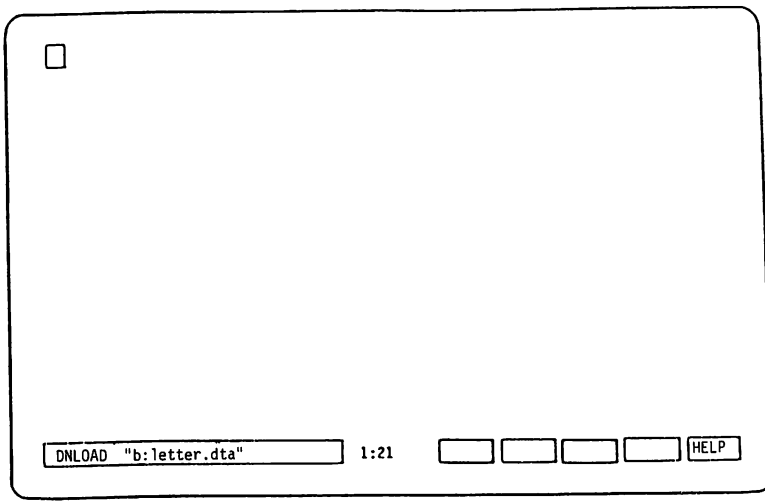


Fig. III-21 - The DOWNLOAD/PCRECEIVE soft key line.

STEP

5) When file transmission is complete, uploading stops automatically;

OR

Press **F6** (the STOP soft key) to stop uploading.

You are returned to the DATA soft key line.

If the system cannot locate the specified file, the message: "**OPEN ERROR- hit any key to continue**" appears on the left of the soft key line. Pressing any key returns you to the DATA soft key line and resumes communication to the host computer.

To accept (DOWNLOAD) a file

STEP

1) Type the host computer command which displays the required file on the Hyperion screen; however, DO NOT type the "enter" key (**Rtn**).

2) From the FILES soft key line, press either the **DNLOAD** or **PCRECV** soft key. At this point, nothing you type is being transmitted to the host computer.

 DNLOAD accepts files using the protocol currently defined in the MODEM table; **PCRECV** accepts files using the IBM PC protocol. However, both keys access the same soft key line (Fig. III-23). Either "**DNLOAD**" or "**PCRECV**" appears on the left of the soft key line, depending on which key was used. Immediately following is a flashing editing cursor.

...continued

STEP (cont)

3) Type the drivespec of the diskette drive where the file is to be stored (i.e., "**A:**", "**B:**").

4) Type a new filespec for the file.

5) Press **Rtn**.

 At this point, transmission to the host computer is resumed.

6) Press the "enter" key (**Rtn**) to execute the command which you typed in Step 1.

 The **Rtn** key generates a blank line. This is the first line entered into the new file. The host computer now begins to transmit the requested file, one line at a time.

7) When file transmission is complete, press the **STOP** soft key to stop downloading and to store the file. You are returned to the DATA soft key line.

If you decide that you do not wish to store the incoming information, press the **CANCEL** soft key. Pressing **CANCEL** stops the downloading and ignores the file which has been received.

If the filespec you specified in Step 4 contains unacceptable characters or cannot fit on the specified diskette, the message: "**OPEN ERROR- hit any key to continue**" appears on the left of the soft key line. Pressing any key returns you to the DATA soft key line and resumes transmission to the host computer. Pressing the **Rtn** key at this point will access the host computer file specified in Step 1, but downloading will not occur. To try downloading again, do not press **Rtn**, but immediately press the **DNLOAD** or **PCRECV** soft key and repeat the above procedure from Step 3, using a different drivespec and/or filespec.

Special Precautions for Transferring Files Using the Manual Data Set-up

The types of data-transfer calls which are usually initiated manually are those between microprocessors. These calls need to be carefully coordinated. Before starting, users should discuss how the transfer will be accomplished. Data could be lost during the transfer if the following precautions are not observed:

* Decide in advance who is "answering" the call. In order for data transfer to take place, one of the machines must be the "originator"; the other, the "answerer". It does not matter which is which. If you dialed the call through IN:TOUCH, your Hyperion is in "originate" mode. To switch to answer mode, press the **ANSMOD** key from the MAIN/DIALER SERVICE soft key line.

* Allow the user who is downloading (receiving) data enough time to prepare a filespec before starting to upload (send). If transmission is begun before the download end is ready, a portion of the data being transmitted will be lost. It may be useful to agree that the upload end will not begin transmission until a given number of seconds after the call has been switched from "Voice" to "Data".

Consulting Your Diskette Directory

You may consult your diskette directory from the FILES soft key line, if necessary.

STEP

1) From the FILES soft key line, press the **DIR/P** soft key. At this point, nothing you type is being transmitted to the host computer.

 The characters **DIR/P** appear on the left of the soft key line, followed by a flashing editing cursor.

2) Type the required drivespec (i.e., "**A:**", "**B:**") and a filespec, if desired.

3) Press **Rtn**.

The directory of all files matching the specified filespec on the specified drive is displayed on the Hyperion screen. If there are more files than can be displayed on one screen, press any key to move to the next screenful. Once the last screenful has been displayed, transmission to the host computer resumes.

Part III

Section 7

Terminal Emulation

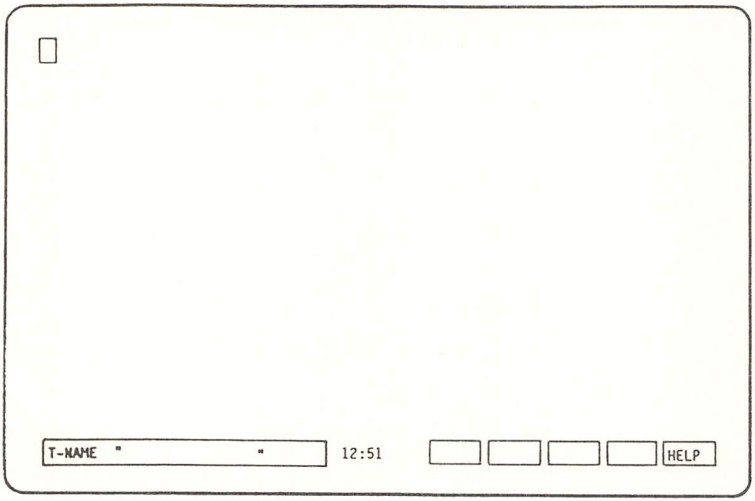


Fig. III-22 - The TERMINAL soft key line.

Section 7

TERMINAL EMULATION

7.1 TERMINAL EMULATION

Terminal emulation means the programming of your Hyperion in order to enable it to behave like a given type of commercially available asynchronous terminal. This emulation is done by calling up a ***terminal emulation filter file***. These filter files are optional accessories for IN:TOUCH, and may be obtained from your dealer.

To call up this filter file and reprogram your Hyperion to act as a specific terminal:

STEP

1) Press **F6** (***Term***) from the DATA soft key line.

 The soft key line changes to the TERMINAL line (Fig. III-22). The flashing underline cursor waits in the T-NAME field.

2) Type in the **drivespec** and **filename** of the terminal emulation filter file. This file should be accessible on your Terminal Emulation diskette, placed in a designated drive. For example; to invoke "ABC" terminal emulation, found on drive B, enter:

 B:ABC

 NOTE: .EXT is automatically appended to the filename, and overrides any filename extension specified.

3) Press **Rtn**.

...continued

The soft key line now changes to match the terminal's special function keys. The Hyperion is now ready to send and receive data in a manner identical to the terminal specified by the filter. Key F10 is labelled IN:TCH.

7.2 RETURNING TO IN:TOUCH

To return to IN:TOUCH from terminal emulation:

STEP

4) Press **F10** (IN:TCH).

 The IN:TOUCH system is reaccessed, and the main DATA soft key line is displayed.

You can now use IN:TOUCH to upload or download files, or to do any other IN:TOUCH task.

To return to the same terminal emulation mode you were in before:

STEP

5) Press **F6** (***Term***) to redisplay the TERMINAL soft key line.

 This time, soft key F6 has the label SAME. When SAME is displayed, an emulator is available.

6) Press **F6** (SAME) instead of entering the terminal emulation file name.

To completely stop the terminal emulation, reaccess the TERMINAL soft key line, and enter **TTY**, without a drivespec, in place of a file name. TTY is a built-in emulator that does not translate a communication data stream. The TTY emulator is automatically invoked whenever an error occurs in loading a terminal emulation filter file.

7.3 ERROR MESSAGES

If the terminal name entered cannot be located, the following error message is displayed:

No File - Hit any key to continue

If there is no room in memory for IN:TOUCH and the emulator the following error message is displayed:

No Room - Hit any key to continue

To create room in memory, the MODE command can be used to reduce the size of drive C. (Refer to the Hyperion User Guide for information on the MODE command).

Part III

Section 8

PHONECNV

Section 8

PHONECNV

PHONECNV is used primarily as a utility to data communication programs when it becomes necessary to transmit binary files.

PHONECNV is an abbreviation for PHONE-CONVERT. This is a conversion program for changing binary to ASCII, and ASCII to binary. This allows you to convert binary files to compressed ASCII format, send them via IN:TOUCH, and return to binary format at the receiver end.

This program is useful when 8 bit data must be sent over a line which only supports 7 bit word lengths. PHONECNV is a program run separately from IN:TOUCH for pre and post processing of files that do not meet these transmission standards.

8.1 FILE STRUCTURES

Only files containing printable ASCII characters and certain control characters can be transferred with IN:TOUCH. Files which are not in this format cannot be transferred, for example, machine language programs which usually have a filename extension of .EXE or .COM.

PHONECNV provides for transformation between two types of files both representing the same information, binary files and ASCII files. A binary file consists of bytes whose value can range from 0 to FF hexadecimal. An ASCII file consists of bytes whose value can range fromm 0 to 7F hexadecimal.

The ASCII file produced by PHONECNV is more complex in structure than typical ASCII files. It consists of a variable length header record followed by one or more 80 character records and terminates with a variable length end record.

8.2 USING PHONECNV

PHONECNV requires two distinct file names to operate. The first name is assumed to be the input file and the second is the output file.

The direction of conversion is determined by the first record of the input file. ASCII files produced by PHONECNV contain headers indicating that the file is in an encoded format. You have the option to override this assumption by appending a switch parameter to the input file specification.

COMMAND FORMAT

PHONECNV infilname.ext [/s] outfilname.ext

COMMAND DESCRIPTION

The command is entered from DOS. Infilname.ext is the filename and filename extension for the input file to be converted. Outfilname is the filename and filename extension of the output file which has been converted. The /s switch is an optional parameter, and can be /A for ASCII files or /B for binary files. Entering /A forces the input file to be treated as an encoded ASCII file, entering /B forces the input file to be treated as a raw binary.

8.3 USER INTERACTION

PHONECNV prompts for any missing filenames in the command line. If you omit input or output filenames, the following message is displayed:

Name of file to convert? :
Name of output file? :

The /s switch of the command line format is also recognized on the input filename it is prompted for.

Note: when uploading or downloading files that have been converted by PHONECNV both UPLOAD or PCSEND and DOWNLOAD or PCRECV commands may be used. It is preferable to use the PCSEND and PCRECV commands to avoid an initial transmission of extraneous characters.

8.4 ERROR MESSAGES

The following Error messages may be displayed when operating PHONECNV. The first column lists possible error messages, the second column indicates whether PHONECNV terminates and returns to DOS.

ERROR MESSAGE	TERMINATE
Cannot find input file	Yes
Input file was not produced by PHONECNV	Yes
Write error on output file	Yes
Error occured when reading input file xxxxxxxx.xxx	Yes
Unexpected end of file on ASCII input file	Yes
Incorrect CRC sequence at line nnnn	No
Line number out of sequence at line nnnn	No

... continued

ERROR MESSAGES (cont)

ERROR MESSAGE	TERMINATE
Invalid character encountered in ASCII input file: "c"	No
Invalid switch character	No
File xxxxxxxx.xxx already exists. Overwrite or Exit (O/E) :	Optional
Too many arguments	Yes

INDEX

ITEM	PAGE
A	
Abort Request	III-46
accessing IN:TOUCH	I-7
acoustic cups	II-5
Add soft key	I-15,III-17, III-34
ANSMOD	III-63
AUTO	III-56
automatic dialing	I-15,III-25
B	
baud rate	III-44
C	
CALL ACTIVE	I-13
CANCEL	III-62
Cap Lock	II-22
combination dialing	III-28
commands	II-12
communicating	
with other computers	I-5,II-25
CONFIG	I-9
configuration	I-9,III-3
connecting	
to telephone	I-5,II-3
to printer	II-4
control keys	I-9
copying numbers	I-17
Ctrl	
+Brk	II-21
+F10	I-7
+Print	III-57
Current #	I-13,III-25
cursor	I-9,I-15
block	II-15,II-17
control soft keys	I-9
editing	II-15,II-19
movement	II-15
D	
Data Bits	III-45
data calls	II-24,III-27,III-39
terminating	III-51
types	III-39
data terminal	II-4,III-65
data transmisssion	
parameters	III-42
D-COPY	I-3,II-5
Deleting	II-19,III-21
Deletions	III-46
Dialer file	I-15,II-24
accessing	III-9
adding data call number	III-41
alphabetical order	III-11
deleting	III-21
editing	III-19
entries	I-17,III-17
numbers and symbols	III-12
parts	III-15
Dialer soft key	III-9
dialer window	II-11
dialing	I-11,III-23,III-28
redialing	I-13,III-28
disconnect	I-11,III-51
diskette	I-3,II-5
copying	I-3,II-5
directory	III-64
DNLOAD	III-61
DOS	
return to	I-20,II-6
soft key line	II-7
downloading files	III-61
Duplex	III-45
E	
EDIT/ADD	I-17
editing with cursor	II-15,III-19
End	II-19
entering numbers	I-15
Esc	II-12,II-21
F	
files	
ASCII	III-69
binary	III-69
download	III-61
transferring precautions	III-63
UPLOAD	III-59
filter files	III-65
FIND	III-16

INDEX (cont)

ITEM	PAGE
H	
HANGUP	I-11
Hold Request	III-45
Home	II-19
Host Enter Key	III-46
Host Turnaround	III-46
I	
input sequence	III-53
Ins	II-19
interconnection	I-5
IN:TOUCH	
accessing	I-7,II-6
diskette	I-7,II-5
exiting	I-20
package	II-1
screen	I-6,II-9
highlighted line	II-9
search line	II-9
introduction	I-1
K	
keyset-switch connection	II-4
L	
LEARN	III-53
learned sequences	III-53,III-56,
Local Auto Line Feed	III-45
M	
Main soft key line	I-9
Master IN:TOUCH Diskette	II-5
Modem	II-25
N	
Name	III-43
NEWNUM	III-28
Num Lock	I-11,II-15,II-22
Number	III-44
Number of Nulls	III-46
O	
one key dialing	I-18
P	
Parity	III-44
Partial Speed Send	III-45
pauses in learned sequence	III-55
PCRECV	III-61
PCSEND	III-59
PHONE	I-7,II-9
PHONE command	I-7
PHONECNV	III-69
placing a call	II-24
Previous #	I-13
Print*	II-23
printer	II-4,III-59
Pulse	I-9
R	
redialing	I-13
regular telephone use	III-23
Resume Request	III-45
Rtn	II-23
Rub Out	II-18,II-23
S	
Same	III-66
Save	I-9
searching	III-15
Serial	II-9
Shift	II-22
soft keys	I-7,II-12,II-21
line	II-11
Space Bar	II-18
speaker volume	II-9,III-6
speaker	III-29
special keys	II-21
Speed Dial Directory	III-46
speed dialer	
display screen	III-33
editing	III-37
entries	III-34
speed dialing	I-18,III-27,III-31
soft key labels	III-31

INDEX (cont)

ITEM	PAGE
SPKR	I-11
Srvice soft key	I-9
Stop Bits	III-45
T	
Tab	I-15,II-18,II-21
telephone directory	I-15
telephone network	I-5,III-3
connecting to	II-3
terminal emulation	III-65
timing calls	III-7
TIMSET	III-7
Tone	I-9
transferring files	III-63
transmission parameters	III-47
TTY	III-66
tutorial	I-1
type of call	III-44
U	
UPLOAD a file	III-59
V	
Voice calls	I-11,II-25,III-28
volume	III-6
W	
wildcard searches	III-16

IN:TOUCH FUNCTIONS

Configure the automatic dialing system:
[SRVICE] + [CONFIG] + Set values + [SAVE]

Locate a dialer file entry:
[DIALER] + Enter search string + [FIND]

Add a dialer file entry:
[DIALER] + [ADD] + Enter name and number + [DATA] + [SAVE]

Edit a dialer file entry:
[DIALER] + [EDIT] + Change name and number + [DATA] + [SAVE]

Edit modem parameters:
[MODEM] + Set values + [SAVE]

Delete a dialer file entry:
[DIALER] + [EDIT] + [DELETE] + [YES]

Display a speed dialer:
[SD1/4]

Add an entry to a speed dialer:
[DIALER] + [ADD] + Enter name + [SD1/4] + [F1/10] + [SAVE]

Edit a speed dialer entry:
[DIALER] + [FIND] + [EDIT]

Delete a speed dialer entry:
[DIALER] + [FIND] + [EDIT] + [DELETE] + [YES]

Dial a number from the dialer file:
[DIALER] + [FIND] + [SPKR]

Dial a number from a speed dialer:
[SD1/4] + [F1/10]

Redial your last number:
[LAST#]

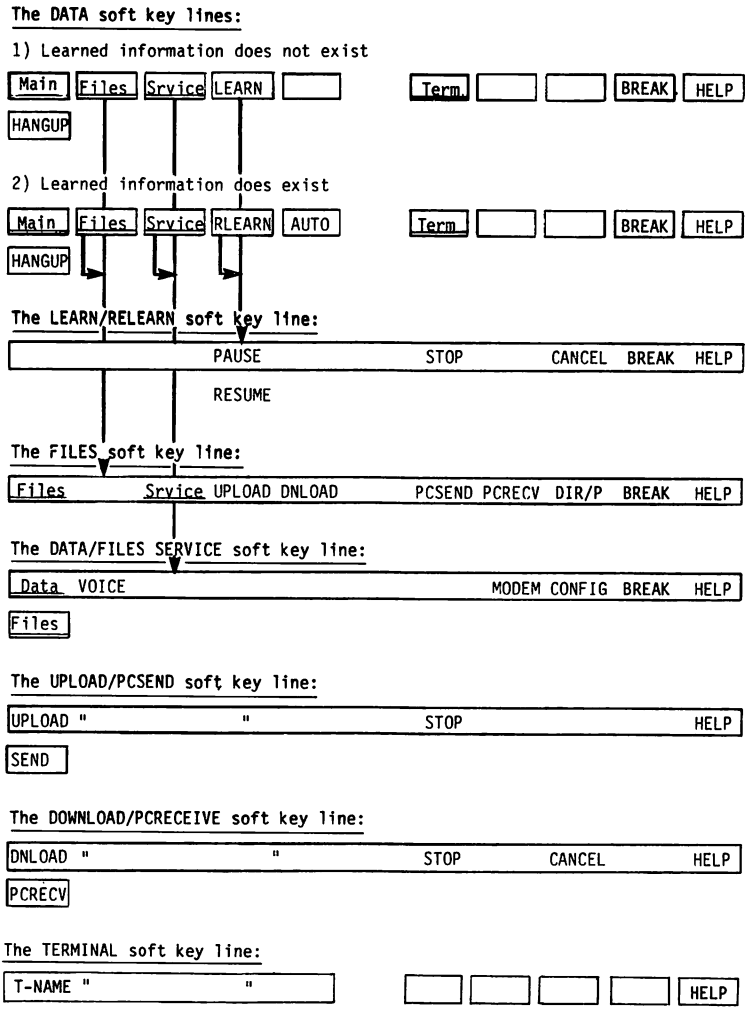
Dial other numbers;
From MAIN:
Enter number [SPKR] (or) Lift handset
From MAIN/DATA SERVICE:
[NEWNUM] + Enter number + [SPKR] (or) Lift handset

Adjust the speaker volume:
Press volume

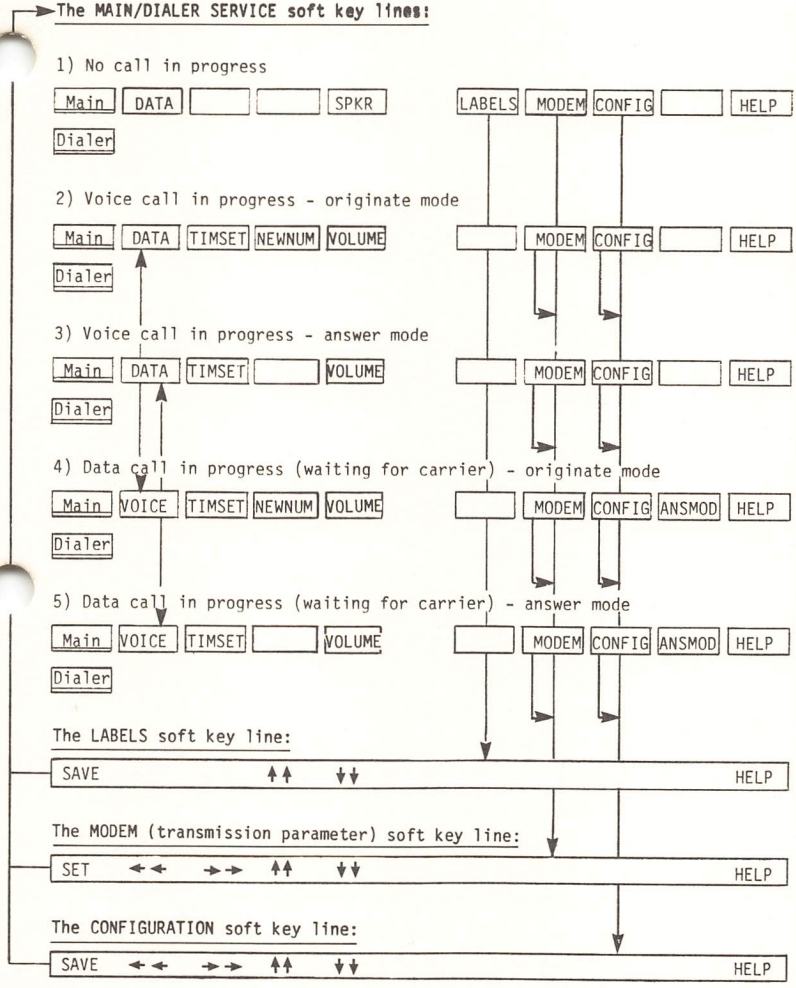
Modify dialer file entry for a data call:
[DIALER] + [FIND] + [EDIT] + Set values + [SAVE]

Store a data call input sequence:
[SPKR] + [LEARN] + Enter sign-on sequence + [STOP]

IN:TOUCH Soft Key Lines



IN:TOUCH Soft Key Lines (Cont'd.)



IN:TOUCH Soft Key Lines (Cont'd.)

